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ALISON K. LIVESAY
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TOUCHING THE PAST: EXAMINING SOCIAL MEMORY PRACTICES IN THE MIMBRES REGION OF SOUTHWEST NEW MEXICO

A DISSERTATION APPROVED FOR THE
DEPARTMENT OF ANTHROPOLOGY

BY

_____
Dr. Patrick Livingood, Chair

_____
Dr. Patricia A. Gilman, Co-Chair

_____
Dr. Paul Minnis

_____
Dr. Samuel Duwe

_____
Dr. Kimberly Marshall

_____
Dr. Rangar Cline

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ABSTRACT

This dissertation develops a multipronged approach to examining social memory and forgetting throughout the occupation of the Mimbres region in southwest New Mexico, from A.D. 550-1350. I investigate the frequency and intimacy with which corporate groups residing in distinct pueblo room blocks referenced and maintained continuity with their past. Specifically, I explore how groups claimed ancestral space, performed ancientness, and constructed their own historical narratives within landscapes through a variety of cutting, adding, and palimpsest creating activities at three sites. Results indicate that all groups, regardless or primacy or ties to founding groups, practiced and displayed real, imagined, or exaggerated antecedence through architectural superposition, intrusive burials, and other habituated and commemorative activities. Subsequently, analysis also demonstrates that there is a temporal break during the Classic period when inhabitants of sites and nearly all room blocks practiced remembering at much greater frequencies than before that period. Lastly, based on the results, it appears that the memory performances at Galaz are different, as they are practiced much more intensively by the North room block during the Classic period, possibly at the communal scale, and may relate to the ceremonial importance of the site.

The significance of this dissertation research lies in asking previously unasked questions for the Mimbres region. Further, results concerning group social memory contributes to discussions of social inequality and concepts of site "abandonment." Most importantly, the methodological approach developed here allows for the

construction of nuanced and multi-vocal landscape memory narratives and identities based on the ever-changing needs of the present, by ancient actors and archaeologists alike.

CHAPTER 1
INVESTIGATING SOCIAL MEMORY IN THE MIMBRES REGION OF SOUTHWEST NEW MEXICO

It has been implicitly assumed by researchers working in the Mimbres region that founding groups with long historical roots to Mimbres village sites are somehow inherently different. Members of founding groups may have enjoyed the benefits of land tenure systems or prestige in ritual morality through their ancientness or antecedence (Roth and Baustian 2015; Russell 2016). As the groups living in the Mimbres region are arguably aggressively egalitarian (Gilman 1990; 2006; Hegmon et al. 2016), do founding groups at villages occupied for centuries really enjoy privileged positions? Are these perceived outcomes of prestige why some groups remember the past? Do founding groups even have control of the past or be able to limit the access of other to memories or places of the past?

My research shows that most residential corporate groups including founding and non-founding groups residing at Mimbres sites during the Classic period (A.D. 1000-1130) performed social memory at statistically similar frequencies. Instead of supporting notions that antecedence may have led to less visible forms of social inequality, I found that similarities in memory practice and group history constructions most likely provided a mechanism for social cohesion at the corporate group and community scale. Founding groups did not always invest more in displays of antecedence, and even groups with less deep historical ties performed remembered in strikingly similar manners to other more historical groups. Unlike other

contemporaneous cultural areas in the greater Southwest, social memory may have been a mechanism to tamp down any inherent social differences, making the Mimbres region and interesting region to further explore and compare.

This study involves an approach that involves the materiality of social memory practices is an integral tool to examine continuity across these periods of transition, transformation, and aggregation for groups at various scales. By examining the relationships founding and non-founding group had to earlier structures and ancestors and how these relationships changed and developed, can be an alternative pathway to examining some of these large interesting yet lingering questions. The approach I take investigates how resident groups and newer arrivals performed antecedence and constructed their histories, however long, with local places of the past. Through this approach, I tackle some of these bigger research questions concerning the presence of social inequality possibly through land tenure or antecedence, as well as what is Mimbres and how these groups come together, develop, and inhabit the landscape.

In this dissertation, I examine both the mechanisms of social memory performances and how the performances were translated into material activities that altered the landscape. I use a customized model first proposed by McAnany and Hodder (2009), in which each act of deposition (adding) or cutting is viewed as a process of landscape modification and palimpsest building. These palimpsests are then analyzed in terms of the relative continuity and discontinuity that groups had with places of the past to establish antecedence. While I rely heavily on the frequencies in which memory is made, recreated, and reinterpreted through past

material cultural remains, I do focus on moments during occupation, during abandonment, and after abandonment. Instead of a hypothesis testing approach, I adopt an approach that argues through a preponderance of evidence (Fogelin 2007) to construct memory narratives of continuity and discontinuity for room blocks and sites. Not only is this work helpful in identifying potentially meaningful measures of social memory-making and forgetting, but it better frames the myriad of ways we can interpret these interrelated processes in relation to each other spatially and through time.

Based on the complex palimpsest building observed through the excavations at Çatalhöyük, it appears that many of those same memory measures can also be applied to examine social memory and social and spatial continuity in the Mimbres region. There are many material parallels between the Mimbres region and the memory work being done at Çatalhöyük site in Turkey (Hodder and Pels 2010; Kuijt 2008). For example, people in both areas practiced intergenerational intramural below floor burials, crania removal, extensive structure remodeling, and architectural superposition, sometimes within the same footprint and interior structure, or sometimes reusing central supports, post holes, or hearths (Anyon and LeBlanc 1984). Both areas were occupied continuously for many centuries, and people created complex stratigraphies of adding, retrieving, cutting, and disturbing early occupational layers. It is through these physical processes of adding, cutting, or both that groups inhabiting the three Mimbres sites that are my case studies continually confronted, interacted with, and used the past for a multitude of present aims (Barrett 1999).

There are numerous ways that archaeologists have sought to interrogate and examine social memory in the archaeological record, but the most successful are those that have are grounded in materiality and the materiality of landscapes (Hodder and Pels 2010; Mills 2008)

By diachronically examining how and when memory performances transform, increase, or decrease in frequency or intensity, I can propose some plausible explanations for why these charged group practices changed when they did. While founding groups were active participants in referencing their past through intrusive burials and architectural superposition, other non-founding groups were also participating in constructing, inventing, and maintaining their own landscape memory narrative constructions. Results document changes in the frequency of remembering practices that correspond with the rise in residential population, as well as variations in the ways and depths groups performed social memories. This rise in frequency and the continuity of these inscribed practices through time crafted complex inscribed landscape palimpsests or narratives. Examination of qualitative differences in both elapsed time between occupied structures and dates of events, and physical stratigraphic depths suggests differences in knowledge, intimacy, and access to the past.

The Mimbres region is an ideal place to investigate these themes and aspects of the process of social memory-making and forgetting, because of the long human history of occupation by many generations of descendant groups. The chosen Mimbres sites were continually occupied for around six centuries from A.D. 550 to

1130 and sometimes beyond. The three sites chosen for investigation were intensively and recently excavated and provide comparable datasets with which to examine the outcomes of many activities involved in the creation and recreation of social memory. The variability in construction techniques of dwellings (Anyon and LeBlanc 1980; Shafer 1995, 2003) and of ceremonial structures (Gilman and Stone 2013) coincideed with the rise of corporate groups (see Creel and Anyon 2003, Gilman and LeBlanc 2017; Roth 2012; Shafer 2003, 2006) and may also have implications for how groups interacted, used, and recreated their past(s) in a variety of ways. Because these corporate groups appear to have been residentially distinct, it is possible to compare the type and frequency of activities through time. My goal was to use published and unpublished reports and field and excavation notes to identify social memory activities at various scales and visibility levels to compare both the frequency and intimacy with which these groups referenced and constructed their pasts. By using social memory as a tool to identify group narratives, we can better understand group and community formation and maintenance, as well as informal identity formation during pivotal transitional periods marked by rapid culture change.

Framing Memory within Landscapes, Stratigraphy, and Materiality Studies

Because of the ubiquitous and nebulous nature of social or collective group memory, which is continuously being performed and interpreted and re-performed and reinterpreted by individuals, groups, and communities at different scales, the concept itself can be somewhat slippery to frame and capture archaeologically. In this dissertation, I define social memory as inscribed and archaeologically visible

commemorative and habituated landscape-altering activities (Connerton 1989), practiced during occupation, at abandonment, and after abandonment by corporate groups. Thus, I take a landscape approach and focus on places and inscribed physical activities conducted at or with those places (Barrett 1999; Connerton 1989; Knapp and Ashmore 1999). Places are where people can encounter earlier structures, the physical remains of ancestors, and once-used living surfaces associated with all sorts of individuals, families, activities, events, and temporalities. In the Basso (1996) sense of the word, places serve as an intersection of peoples, events, and times. As such, it is not always clear whether references to earlier places by descendants are meant to associate with any or all of the above domains intricately entangled in the larger concept of place.

Antecedence, Social Order, and Social Inequality

While remembering can be an inclusive process at some scales, it can also be a process of negotiating social order and inequality. Memory, like history, is a constant recreation, reinterpretation, or reimagining (Snead 2008) of the past and ancestors for the present and perceived future or to legitimize a certain social order (Van Dyke 2004, 2009; Wills 2009; Wilson 2010). Ethnographies such as the Hopi origin and migration stories recount how social order is constructed and negotiated at the lineage or clan scale through these narratives of the past (Bernardini 2005, 2008; Kuwanwisiwma and Ferguson 2009; Whitely 2002). To a certain extent, antecedence or those who arrived first at a site, does play a role in determining the status of the clan and the extent of ritual morality they hold within the larger group. It is safe to assume that to some

extent, inhabitants of the Mimbres region during the Classic period (A.D. 1000-1130) placed a similar emphasis on antecedence. Indeed, if these groups dwelling and constructing complex palimpsests along the Mimbres River did have instances of social inequality, it may have been along the lines of antecedence. Groups could have used the physical and material performances of their longer ties to place to their advantage in the legitimization of land tenure and access to the most profitable agricultural areas (Schriever 2012), or to give them more authority in the ritual domain. That said, antecedence is only one form of social memory performed at the supra-household level.

I also explore Bahr's (2001:587) concept of parody, or the playful borrowing and compassionate telling of one's ancientness in reference to the ancientness of one's neighbors, as an additional explanatory tool for some social memory practices. Maintaining lineage continuity or renegotiating an individual's place within the family, although important components of social memory, are not always very visible to others outside the kin network. Both maintaining continuity and renegotiating social order can be performed for a variety of reasons simultaneously by the same social actors in the process of constructing their present based on an interpretation of their past. Further, while some groups perform social memory as a way of consistently legitimizing antecedence and any prestige that accompanies it, social memory does not always signify inequality and may include inclusive activities to bring a community together as a whole regardless of the particulars of their shared or unshared pasts.

Contributions to Mimbres Research and Beyond

This research contributes to documenting the nuanced ways groups are formed and how they negotiated cultural change during times of transition such as the pithouse-to-pueblo transition with tis concomitant social changes (Anyon and LeBlanc 1980; Creel and Anyon 2003; Shafer 1995, 2006). Similarly, this work can expand our understanding of abandonment, visitation, and the endurance of certain places on the Mimbres landscape. Additionally, it may provide a line of evidence that hints at some horizontal social differentiation when conventional bioarchaeological studies relating to health, nutrition, and burial accoutrements suggest there are no formalized differences (Baustian 2015; Gilman 1990, 2006; Holliday 1996). Further, it provides a rich and complex dataset to compare not only with other southwestern groups but also with other settled agricultural groups. It also adds to the corpus of scholarly research concerning the fuzzy line when memory becomes history for certain groups in the past and at what social scale groups have access to the past and use it for present aims.

I found that all groups regardless of whether they were descendants of founding families or belonged to founding room blocks performed antecedence through similar post-abandonment activities such as intrusive burials and architectural superposition. Especially during the Classic period, A.D. 1000-1130, and during the height of population of Mimbres Valley sites (Blake et al. 1986), it appears that all groups performed these practices in greater frequencies than earlier. The results for the preeminent site of Galaz suggest that social memory may have been performed at

the corporate group and even the communal scale possibly for group cohesion or integration.

As there a few statistically significant differences with regards to these activity frequencies between room blocks, social memory and group history construction and performance may be an avenue of being or becoming Mimbres. Groups may have claimed antecedence through references to past places and ancestors, as others did, for social cohesion and to belong. I argue that antecedence is part of Mimbres identity, whether it is real, invented, or exaggerated. The three sites I investigated are rife with variation and experimentation in material culture, and I suspect this lack of internal variation in remembering activities is part of the Mimbres community ethos. This ethos is characterized by experimentation and roughly equal access to ceramic designs (Hegmon et al. 2016) and is further supported by the lack of enduring or formalized social inequality (Baustian 2015; Gilman 1990, 2006; Holliday 1996; Russell 2016). This approach and my findings have very real implications for those studying community formation, social inequality, and mechanisms that mask incipient inequality for larger communities via the performance of social memory in the construction of group histories.

History has always been an important element that informs and shapes our present for our perceived future. Histories, memories, and identities associated with a particular place or group are constantly being remade and remembered at different scales. Different emphases are placed on certain ancestors, cultural heroes, and events as the needs of the ever-changing present and the capabilities of memory

retention dictate (Barrett 1999; Echo-Hawk 2000). Assmann (2008) states that history and memory are not the same, but both are interrelated processes in which all groups of ancient peoples took part and made their own. Therefore, I contribute knowledge concerning how founding and non-founding kin-based groups living a thousand years ago in the North American Southwest constructed social memory in ways that shaped their identities and allowed them to construct historical narratives of their ancientness through the material residues of their past.

Organization

The primary focus for this dissertation is to document and examine through a variety of measures the ways and frequencies with which founding and non-founding family descendants of multi-family sites in the Mimbres region materially referenced their past through physical proximity or continuity through time. Specifically, I am fascinated to see how these different memory constructions and narratives may have played out on the landscape at the corporate group level. In the Mimbres area, corporate group formation occurs during and becomes formalized after the pithouse-to-pueblo transition. On a secondary level, I am interested in grappling with motivations for some of these memory practices and changes in their frequency in terms of displays of ancientness or antecedence and of renegotiation of household and supra-household informal identities according to their interpreted pasts and constructed histories. Are founding groups displaying antecedence consistently and at an observable scale? Are founding groups the only ones using certain social memory

practices at a certain time, or is there contestation in the constructed narratives of group histories played out in and through the landscapes?

Given these research aims, I provide a necessary theoretical background in Chapter 2 concerning memory as a process. I address intersecting themes concerning how the past can be embedded in the landscape in the form of places, remains of ancestors, and abandoned structures. Places serve as a nexus for inhabitants and actors to encounter, interpret, and reimagine the past(s) through time based on their own experiences and perceived present. By associating individuals with certain places or later structures with earlier places, or removing/reusing pieces of earlier places, groups in the past could display and inscribe their connection and knowledge for many ends. It is through inscribed material practices such as intrusive burials, burial disturbances or removals, and architectural superposition and continuity or reuse of space that groups can perform social memory and construct their own histories and memory narratives (Barrett 1999; Hodder and Pels 2010; Roth and Baustian 2015). Renegotiating social identities at varying scales and asserting antecedence for land tenure or ritual morality are only two possible explanations offered for some of the same memory practices. Equally important, I discuss the related aspect or potential of these memory-making processes for social ordering and social inequality as identities, especially lineage identities, are constructed and renegotiated. I end this chapter with a summary of the guiding theoretical principles I found most helpful in the framing and interpretation of my data.

In the third chapter, I provide some background concerning the Mimbres region and the social, economic, ceremonial, and organizational changes that occur during its six or seven centuries of invested settlement. As I take a diachronic perspective and compare frequencies of practices during the Late Pithouse (A.D. 550-1000), Classic (A.D. 1000-1130) and Postclassic (A.D. 1130-1400) periods, I spend some time detailing the salient aspects of each period. I discuss the differences in architectural phases, since I often measure time between occupation and the events of post-abandonment remembering in terms of architectural phases. Following phase descriptions, I discuss the concomitant changes in the ceramic, mortuary, and social organization domains that frame my dataset and provide contextual support for the patterns I observe.

In Chapter 4, I describe my methodology grounded in physical adding and cutting processes that result in complex palimpsests over time. This cutting and adding provides not only a useful framing for my discussion but also a useful organizational tool. I also discuss how some of my activities or measures align with those proposed by McAnany and Hodder (2009). Next, I provide support for using many of my measures such as burials and removal by documenting ethnographic approaches to places and connections to place. I then define the variables and measures that appear to best capture memory as they fall under categories of adding, cutting, or adding and cutting. Both adding and cutting can contribute to remembering, forgetting, or either/both given the particular context. Adding and touching are not always indicative of remembering, and neither is cutting always

indicative of forgetting. Retrieval of earlier objects, murals, and ancestral remains and the placement of intrusive burials are cutting activities that construct memory. For intrusive burials, I also detail which contextual information I collect and analyze alongside their frequencies to assist in interpreting the scale, visibility, and significance of these meaningful actions. Following this, I detail the three sites used and my rationale for using each of them. Subsequently, I define the residential groups and founding groups that I seek to compare at each site. Lastly, I detail my qualitative approach to statistics and summarize my methodological approach.

This type of approach allows for multiple ways of interpreting the landscape through the eyes of both the archaeologist and ancient actors. By measuring memory through the quantitative intensity and qualitative intimacy that groups had with their pasts through places, one can place weight on some activities more than others and observe contradictory, mirrored, or parodied claims to ancestral and founding places.

Chapter 5 consists of the analysis frequencies of adding, cutting, and the burial of people and objects across time and between room blocks. I also analyze the frequency of prehistoric disturbances or burial removals. Much of the chapter is devoted to considering not just the presence or absence of intrusive burials, but also when they occur and if they differ qualitatively from room block to room block. For example, are some buried stratigraphically deeper than others, such as near or below the floor of an older abandoned structure? Did inhabitants often place deceased members intrusively in contexts that already contained burials? Are some in habitations versus ceremonial structures? I include summaries for all chapters but

they may be particularly useful to those that do not want to trek through the detailed statistical results of the significance testing for each memory measure.

Chapter 6 is organized similarly to the previous chapter and presents the results of measures of adding and cutting that involve architectural structures and continuity or discontinuity in constructed and ancestral space. The frequencies and differences in frequencies between room blocks are presented for architectural superposition, pre-room burials, rooms with multiple floors, remodeled rooms, and pithouse filling with fill or trash after abandonment. Analyzed cutting activities include razing or scouring of once extant structures, burning, and removing floor assemblages or central posts prior to or during abandonment procedures. At the end of this chapter, I summarize where statistically significant differences occur between room blocks or sites for each of the measures.

After reporting detailed statistically significant results within each measure, I bring each of those lines of evidence back together in the discussion in Chapter 7. Instead of relying solely on the significance testing in the previous chapters, I categorize, according to archaeological research and ethnographic data, each of the measures into acts of remembering, forgetting, remembering and/or forgetting. By doing this, I can more comprehensively examine the changes in frequencies of remembering and forgetting over time and evaluate whether differences existed between room blocks. Using standardized line graphs to track frequencies over time, I construct and describe personalized landscape memory narratives for each room block and each site. To tease apart moments of remembering for antecedence displays and

those for continuity and negotiation of lineage identities, I examine the frequency with which the people in each room block placed intrusive burials in superimposed contexts, ceremonial contexts, and rooms that contained earlier burials. Are intrusive burials in rooms with superposition and earlier burials more indicative of real affinity or continuity and less as plausible inventions or creations? Lastly, I return to my three arguments and discuss the series of observations that support them. These arguments are that not only founding groups are practicing antecedence, but nearly all are increasing practices of remembering during the Classic period, and the Galaz site and North room block are quite different than the other room blocks at the other two sites.

I provide a few short closing statements in Chapter 8 and discuss where my research fits within the larger corpus of Mimbres and social memory work. While there are limitations in my ability to answer some of the intriguing questions concerning the aims of certain memory practices and their intended audience, this research could help inform some important discussions concerning issues of "abandonment," social inequality, and antecedence, as well as the myriad of ways groups traversed the pithouse-to-pueblo transition and its associated changes. Beyond the Mimbres region, I think this approach based on cutting and adding measures could be very useful for examining memory through places for some groups and how they maintain or construct group identities and social order. It would be interesting to compare the different ways and frequencies that groups use memory practices that reference earlier places or times, especially during times of transition.

CHAPTER 2
CONCEPTUALIZING LANDSCAPE AND PLACE AS A PROCESS OF MAKING MEMORY, IDENTITY, AND SOCIAL ORDER

To a certain extent all societies look back into their own past as it simultaneously shapes their present. How did ancient groups understand and conceptualize and commemorate their remembered origins and past (Bradley 2002; Connerton 1989; Gillespie 2008), in line with their perceived and projected futures and placement within the greater cosmos (Ashmore 2008; Fowles 2009)? Are founding groups displaying antecedence consistently and is claims to space archaeologically visible? Are founding groups the only ones using certain social memory practices at a certain time, or is there contestation in the constructed narratives of group histories played out in and through the landscapes? In order to answer the complexity of these issues, I employ a theoretical approach that allows me to track continuities and discontinuities in the expression of how ceremonial and domestic space and place (Basso 1996) is constructed, occupied, abandoned, forgotten or remembered, reused, or reclaimed after many years. Overall similarities or differences in how groups with long and short historical ties interact with and reference people and places of the past can help researchers better understand group and community formation, as well as how groups use the past to navigate present cultural changes.

In this chapter, I offer select pieces of the archaeological discourse surrounding memory and organize them into themes that impacted the avenues I used to investigate social memory practices of a group in the past. The intersection of these

themes provides guiding principles that I found useful and will describe in the next paragraph. Lastly, I discuss three well-contextualized case studies from Great Britain, Mesoamerica, and Turkey that serve as helpful models in investigating the multi-layered relationships peoples of the past had with past places, and the narratives they inscribed materially for themselves.

The guiding principles for examining domains of memory-making and performing and interpreting frequencies of patterns in the context of interplaying social practices are as follows: 1). That memory-making is a process. 2). That memory-making and the past are both every-changing and affected by the present. 3) That remembering occurs and is entangled and materialized at "places" on the landscape and cannot be divorced from them. 4). That memory coincides with other processes such as identity and group history construction and can result in plurality of place (Bender 2002:107).

I organize this chapter around intersecting themes running though these discussions and scholarly works on memory and memory of groups in the past. These themes act as nodes of interrelated topics and approaches such as memory and place, materiality and practice, memory and history, and identity, inequality and social order, all of which are a nexus in understanding social memory and material processes. Using a landscape perspective that combines memory and materiality is a relevant lens through which to examine the seemingly abstract, convoluted and multifarious phenomenon we label as collective or social memory.

Entanglement of Landscapes, Place, Time, and Memory

The terminology of landscapes comes from the phenomenological research of the last couple of decades (Gosden 1994; Tilley 1994). Subsequent research on landscapes has defined some key attributes such as embodiment and the materiality of time. Lived experiences of natural and built landscapes are embedded and concomitantly shape the landscape (Knapp and Ashmore 1999). So too is time and the past embedded within landscapes. Bender (2002:103) stated that landscape is the materialization of time or units of time that are clipped together to form multiple and complex stratigraphic layers. Peoples of the past can encounter, add, cut, and transform these layers through in repetitive and multi-vocal ways. They can choose to access earlier temporalities through retrieval (Bradley 2002, Hodder and Cessford 2004), or even place the past alongside the present through intrusive burials, or lastly to cover over or erase triggers for remembering the past.

Landscapes or palimpsests are naturally diachronic, and any successful approach cannot divorce landscape from time or social memory (Anschuetz 2001; Gillespie 2008; Meskell 2008). For example, this approach has been used to investigate the construction of place (Basso 1996; Gillespie 2008; Snead and Preucel 1999) and how the life histories of objects and places are created, inscribed with meaning and become mutually reinforcing (Olsen 2010). As Knapp and Ashmore (1999:8) stated, as landscape are being constructed, conceptualized, and idealized, they become the "arena in which and through which memory, identity, social order and transformation are constructed, played out, re-invented and changed".

Settlement patterns including architectural superposition and remodeling, and burials, intrusive or pre-room are all aspects of material culture that archaeologists can investigate. While I concentrate only on the built cultural landscapes, it would also be productive to examine if peoples' relationships with more natural landscapes changed through time. Here, I define landscapes as places where people inhabit, re-member their past and history, and act to recreate and transform the present based on a perceived and hopeful future (Barrett 1999; Basso 1996; Gillespie 2008). Because the present is always advancing, the ways in which landscapes are used to display antecedence, identity, or social order may differ significantly from period to period (Thomas:1996:90).

Social Memory Practices Make Place

Social memory can be a very abstract concept. Here, I define social memory as embedded collective memories that play out in material forms surrounding places. As such, I find Assmann (2008:55-56) to be useful in detailing how memory can be formed and transmitted from generation to generation. Transmission of memory can occur through visual reminders that serve as aids of memory, sites and monuments that present palpable relics (see Barrett 1999; Hodder and Pels 2010; Kuijt 2008), and commemoration rites that periodically reactivate memories through collective participation. Each of these forms have commonalities that include and revolve around places and things.

Places are spaces that ascribed meaning through attaching experiences, events and memories, and are socially constructed and conceptually engaged (Hodder

2013:12). Memory is intricately coupled with place and shared in, and experienced or triggered through places. It is integral that we view social memory as a process of remembering or forgetting, as it is continuously being referenced and reworked through places (Van Dyke and Alcock 2003:3). In a sense, to perceive places is to create places. Activities that add, cut, insert, remove objects, or construct palimpsests also create histories of the place (Pauketat 2008:75). Thus, they are place-making behaviors and concomitantly serve as ways of constructing history (Basso 1996; McAnany 2011). Places or a "sense of place" (Basso 1996) can be continually created and experienced through engagements with built and natural landscapes, which are imbued with powerful memories and past meanings. These can be real memories such as burial grounds and meeting places that are site specific (Connerton 2009:7) or they can be more mythical and tell of a group's origin (Knapp and Ashmore 1999:14; Whitely 2002). Nevertheless, landscapes and "place" are tools that can be used to understand how life is organized and experienced (Knapp and Ashmore 1999:14), because it is impossible to have places without memory (Basso 1996:86-87).

It is important to first define the scale of place and of actions occurring in those places. For many groups, the house is the primary site through which memory is reinforced, reimagined, and embodied daily habituated repetitive practices (Bourdieu 1977; Connerton 1989; Hodder and Cessford 2004; Joyce and Gillespie 2000; Rowlands 1993). Those practiced at supra-household levels may be more inscriptive and commemorative as they relate to specific social memories rather than enactions of routine practices of daily life (Connerton 1989). By nature, inscribed memories may be

more visible and intentional, but also more episodic. Many archeologists used Connerton's (1989) distinctions between inscribed and incorporated memory in their investigations of times passed and focus on the inscribed practices, as they are more easily to observe important places (Van Dyke and Alcock 2003:4). Being easily seen denotes that remembering is intricately bound up with one of its essential components that deals with power and authority; with the visible and invisible (Mills 2008), with the distant, detached and irretrievable past and the recent changeable past (Barrett 1999; Gillespie 2008). To understand social memory, we must understand the linkages or entanglement of events, peoples, memories, places, and objects (Hodder 2012).

Materiality and the Practice of Memory

For these landscape approaches to be particularly useful, they must be culturally grounded in "practices and traditions" (Pauketat 2001) of a group or society. Pauketat's concepts of "practices and traditions" are analogous to Ashmore's (2002) "decisions and dispositions." Necessary to these concepts is a discussion of scale, both spatial and temporal. Pauketat's (2001) applications of the concepts of "practice" and "tradition" acknowledge that perceptions of people that lived in the past, and subsequently their habitual practices or actions are shaped by their structures or traditions and recursively shape or transform those structures and traditions. Seen along these lines, place is both a medium for and the outcome of human agency and action as structured by tradition and the past (Bourdieu 1977; Barrett 1999; Giddens 1984; Gillespie 2008; Knapp and Ashmore 1999:8). Practices are governed by

overriding structures and traditions. Thus, structured deposits (Joyce 2008) and palimpsest building activities take place both "in the moment" and also extends forwards and backwards in time (Bender 2002:107).

Actions of stratigraphic altering practices of a place, such as through superposition, is dependent and can be limited on what levels already exist (McAnany and Hodder 2009:11). And while some actions are unintentional, I agree with McAnany and Hodder (2009:11) that the decisions to work around existing structures or pithouse depressions, indicates intentionality through its physical and relational links of the present to the textural surfaces of the past. Equally true, the decision to not build over or interact with a previously occupied space may indicate an intentional break with the past.

This discursive relationship affects all activities of citation or recalling earlier events, peoples, or places. Barrett (1999:257) best describes the contingent relationships between past and future actions when he stated that "each generation has to confront its own archaeology as the material remains of its past piled up before it." In the Mimbres region, inhabitants chose to confront and use the remains of earlier occupied dwellings and ceremonial spaces with which groups interacted, as attractive locales to bury some of their dead and build some of their later structures. These remnants helped create and maintain identities concerning ancientness or antecedence and tied people to place.

Not everyone has to same rights and access to objects, people, or places of the past. People's relationship with the past can be used to contest the present. An

example of this is Mills (2008) discussion of the ritual closing and remodeling processes of kivas at Chacoan great house. Her discussion leads to the interlaced concept of place and landscape regarding the dynamic and continual creation of communal or group identity and social order (Knapp and Ashmore 1999:14).

History and Memory Constructions Through Layers and Places

History and memory are by no means synonymous, but are interrelated, interacting, and are constructed using similar processes. By this I mean that both are discursive processes. Memory and memory practices have a history, or genealogy of practice (Mills and Walker 2008:13), and history is itself a form of memory (Assmann 2008:62). The past is not fixed or closed but also being changed through reinterpretation in dynamic ways, groups are actively using select inscribed memories to construct histories (Assmann 2008:57; Connerton 1989). At any given time, groups can construct competing narratives, because what is remembered is selective and can thus be socially constructed and contested (Connerton 1989). On the other hand, contestations do not always have to occur as we "retain of the past that part which is still alive or able to live in the consciousness of the groups that maintain it" (Halbwachs 1992:65). If we no longer remember specific events or individuals, then the past is opened to be remembered as present circumstances see fit.

Given the nature and scale of these constructions, there is often an underlying element of politics and power. Many scholars recognize the politics of stratigraphy making (McAnany and Hodder 2009:10) in displaying, dominating, destroying (Pauketat and Alt 2003). For both the Hopi and Zuni (Colwell-Chanthanphonh and

Ferguson 2006: 153, 158) places of the past, and spaces that ancestors continue to dwell are powerful places and remain significant long after-abandonment and migration from them. As such interactions with these places by different groups are powerful statements about one's own ancientness and access to ancestral spirits (Colwell-Chanthanphonh and Ferguson 2006; McAnany 2011). However, memory centered interpretations about the past are not necessarily about accurate recollection, but about making meaningful statements about the past and highlighting aspirations for the future (Holtorff and Williams 2006).

One of the ethnographically documented domains involving social memory is that of primacy or antecedence, and the relationship of the living to affiliated dead or ancestors (McAnany 1995, 2011). As landscapes are dwelled in and inhabited by the dead and living alike (Colwell-Chanthanphonh and Ferguson 2006), ancestors and retrieval of or references to (intrusive burials) are powerful material performances worthy of investigation. Groups may maintain their lineage ties and construct their own biographies through citation of ancestors or their domains (Derrida 1982; Mills and Walker 2008; Van Dyke 2004, 2009). Not all mortuary ritual is about performing antecedence, but mortuary practices that affect or included ancestors might be referring to generic or specific ancestors (Whitely 2002) and might be helping to continuously build and negotiate "earthbound geneaologies" (Mcanany 1995). Alternatively groups may make these physical references to ancestors or earlier temporalities for privileges or statuses associated with land tenure (Adler 1996; Roth and Baustian 2015; Schriever 2012) or for ritual morality (Russell 2016). Groups may

construct narratives that document their first arrival and their prime place in social order (Flannery and Marcus), or to subvert, maintain, or alter the social order (see Chapter 4 for a more complete discussion of antecedence). However, memory can be practiced for many reasons (Mills and Walker 2008). I am intrigued by the realization that not all forms of antecedence may be about being first or lead to contestations. A useful concept borrowed from Bahr (2001) is that of parody. According to Bahr (2001:587), each people's telling of ancientness was a parody or playful and compassionate version of its neighbors' telling. Parodies thrive on intended but unadmitted differences (Bahr 2001:605).

Using Memory Practices to Construct, Maintain, or Alter Identity, Inequality, and Social Order

As peoples of the past actively remembered, interpreted and thus re-created their past, their conceptualizations become represented and observable in the actions, sometimes discursive, that represent one's existence (Sassaman 2011). This identity formation is both plural and situational (Gardener 2011) as various social actors will interpret the past differently and act accordingly. Often social memory strategies targets group history and are explored and created through confrontations with relics, residues, and reminders of past events (Assmann 2008:62). Because landscape is a palimpsest, each interaction with a meaningful place could have a different outcome, built on the preceding discursive acts of others. While social memory tends to reproduce social order (Nielson 2008:208), we must recognize the multiple and diverse impact of the past based on the ever-changing present (Assmann 2008:54; Said

2000:179). Below, I describe a few case studies that resonate with the guiding theoretical principles.

Barrett (1999) and Gillespie (2008) are two examples that illustrate how people engage in places with monuments and landscapes imbued with meaning and significance in Iron Age Britain and ancient Mesoamerica. These authors frame places and memory as processes, and as sites of monument building, whose performance can lead to the formation of a diverse group of identities. The identities often follow through cosmological lines, which legitimate and naturalize social relationships and order as people encounter, interpret and engage with monuments of the past. It is in the building of structures that "negotiation of personal and corporate group identities within a referential framework were structured by fundamental cosmological principles, as seen in the persistent spatial pattering of acts of deposition" (Gillespie 2008:124). The repetitive "inscribed practices" on the landscape (Connerton 1989) can contribute to social memory in ways that transcend the "temporal and spatial limitations of ephemeral performances and actions (Gillespie 2008:131). Therefore, memory associated with these places, monuments, or sacred landscapes can create the sense that nothing has changed and that things are always how they were. But as due to the discursive nature of these places, groups can encounter and transform through the physical remains of the past, analogous to the actor-network theory put forward by Latour 2005.

As the past is dynamically being rewritten and reclaimed (Assmann 2008), power and identity politics are clearly at play during the confrontations of the past

according to the present. Archaeologists see variations of power and place (Cobb 2005:571) or contestations of social order across time and space. The myriad of levels different people inhabits, experience, and interact with place and memory, naturally results in great variation in how groups perform their own histories. Differential access to memory, ceremonial space, or places of important memories most likely existed in the past and as landscape is a palimpsest, it is constantly being re-membered, re-imagined and transformed by many different social actors (Barrett 1999; Gillespie 2008; Knapp and Ashmore 1999:6).

Another example that illustrates how places and the material practices of memory intersect in with those places to formulate and maintain group history are the history houses at Catalhoyuk (Hodder and Pels 2010). At Catlahoyuk, buildings are rebuilt in the same location and same architectural footprint many times with large numbers of burials placed at varying episodes during the occupational and generational sequence (Hodder and Cessford 2004; Hodder 2013:26; Hodder and Pels 2010). Generally, the interior space is used and organized similarly, with the dead buried below the floor at one end near the platform. Thus, there is not just physical continuity between the structures and occupations through time, but continuing to lay the newly deceased next to or sometimes on top of their ancestors, groups involved in the burials confront, reaffirm, and remember their own histories though their physical surroundings. Inhabitants of these places reinterpret and make sense of themselves according to their perceived present situation colored by the residues of their past and their ancestors (McAnany 1995) beneath their feet.

Summary of Theoretical Approach

If memory is created and maintained through places and landscapes are a collection of built and natural places, then we can examine landscapes as intersections for inscribed memories similar to how we examine artifacts. Sites and places can be remembered in very tangible ways through inscriptive, repetitive, and commemorative practices. Any approach should consider the entanglement (Hodder 2012) of peoples and narratives with building remains, residues (Barrett 1999) depressions, bodies, ancestors, houses etc. The reasons for this approach is not to reduce materiality as just a physicality of things, but instead frames materiality as a dimension of practice (Meskell 2008). Along these lines, stratigraphy-building is a social practice (McAnany and Hodder 2009). The ways the groups add or cut the landscape and interact, reference, touch, ignore, or raze places of the past must be understood as a process within social and historical contexts.

Social memory is always a construct that is selective, and thus it changes over time and from person-to-person. As each group and generation projects the urgent purposes or preoccupations of their present and self-image of one's own group onto the past they construct new, invented, or exaggerated narratives (Assmann 2008:66; Bender 2002:105; Said 2000:179). My mission is to document these changes and examine when, where, and how the past can be manipulated with regards to a groups positionality about continuity with places of the past. My goal is not to rank the memory narrative constructions of some groups as true while others are false or

fictions, but rather to observe and explore the fluidity of this complex process, as all narratives of antecedence or primacy are in some sense constructions.

The following chapters embody my attempts to examine the ways that pre-Hispanic lineage groups living in the Mimbres region constructed their own historical narratives at certain points in time, while concomitantly investigating the history and tradition of those group memory constructions. In a sense, it seeks to capture, document, and begin to tease apart memory "genealogies of practice" (Mills 2009:40).

CHAPTER 3
MIMBRES CULTURAL REGION OF SOUTHWEST NEW MEXICO

To examine social memory in the Mimbres region, I here situate the study within the various material traditions that were at work while groups were practicing, maintaining, and re-creating their social memory histories. First, I will provide a descriptive summary of the Mimbres chronology and define the periods and phases of domestic architectural changes. Next, I will detail the concomitant changes to formal ceremonial architecture and discuss the pithouse-to-pueblo transition, associated temporal changes to the ceramic and mortuary tradition for each temporal phase, and the relationships that inhabitants had with their ancestors. I will then reflect on the social organization and the formation of corporate or lineage groups and how the changes in architecture mirror their development. This chapter will end with a brief review of previous examinations regarding social inequality in the Mimbres region. This chapter will provide a contextual backdrop for the next chapter detailing the methodology for examining how social memory is performed by different groups, perhaps for diverse objectives and audiences.

The three sites, Galaz, Mattocks and NAN Ranch used in the present study were occupied for at least six centuries and are located in the Mimbres Valley in southwestern New Mexico (Figure 3.1). While the cultural sphere extends north and west into the Upper Gila region, east to the Rio Grande, southwest into New Mexico's bootheel and east into Arizona, I will only be examining sites in the Mimbres Valley proper because of the site data to which I had access. That said, I will minimally

discuss general changes that occur within and outside of this “heartland” (Gilman and Powell 2006; Shafer 2003:1).

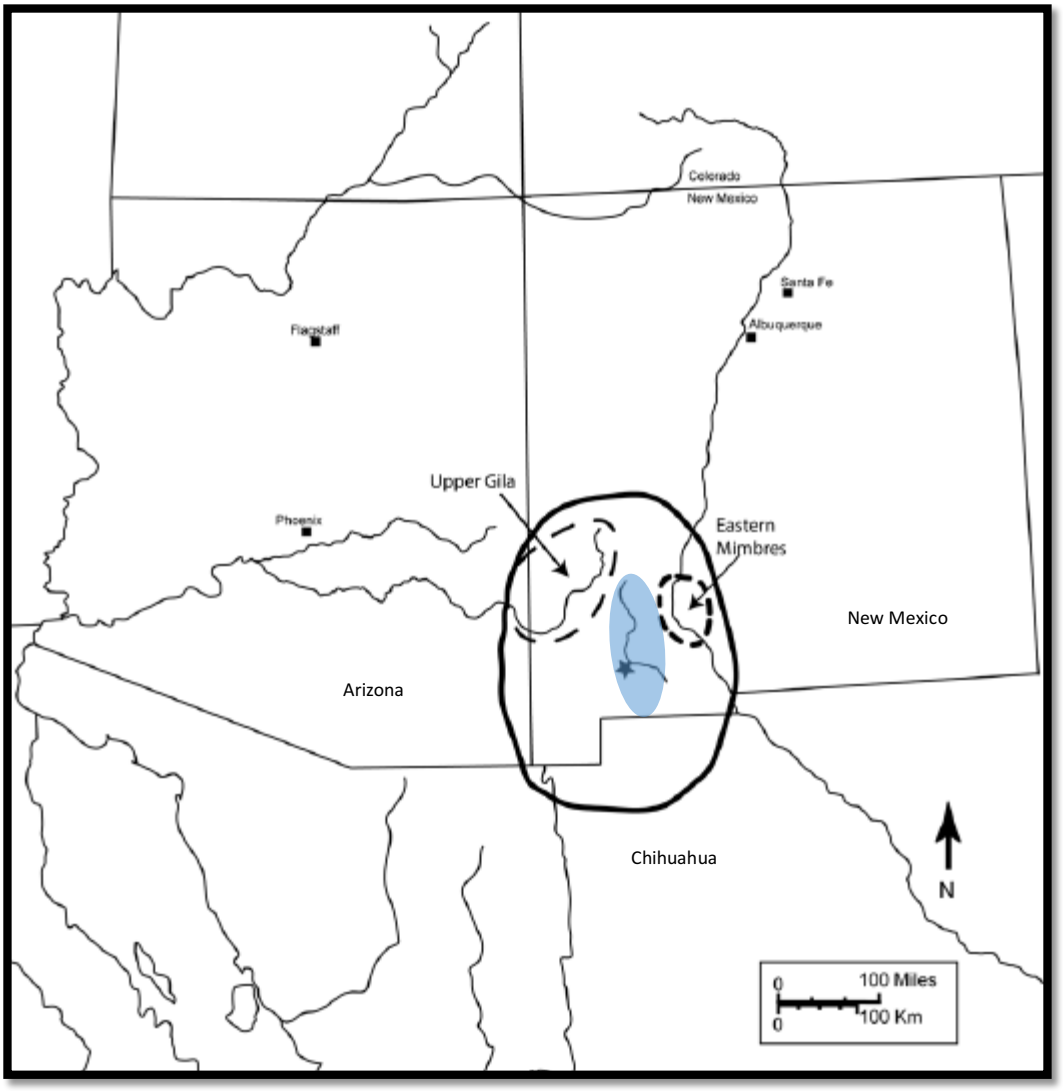

Figure 3.1 Map of Mimbres cultural area. The Mimbres Valley is represented by the blue shading.

Mimbres Region Chronology

Haury (1936) first discerned spatial and temporal changes in the Mimbres region architecture while working at Mogollon village in the Upper Gila and the Harris

site in the Mimbres Valley, as did Cosgrove and Cosgrove (1932) during their excavations of the Swarts site in the Mimbres Valley. A good portion of Haury's original chronology is used today, including continued use of his Georgetown, San Francisco, and Three Circle phases. However, with recent excavations and newly calibrated chronometric dates, refinements have been made. These changes include the recognition of the Early Pithouse period, the division of time in the Late Pithouse and Classic periods, as well as the recognition of occupations after the Classic period (Gilman and LeBlanc 2017:49). For more discussion of recent alterations to the Mimbres regional chronology, see Anyon et al. (2010), Gilman (2010), Gilman et al. 2014, Hegmon et al. (1999), Nelson (1999), Shafer and Brewington (1995), and Shafer (2003). These phase and period designations include substantial changes in the organization of domestic and ceremonial spaces.

I use Anyon and LeBlanc's (1981) phase and period names as well as associated date ranges, with the exception that the Classic period ends at A.D. 1130 (Table 3.1, Figure 3.2). Even though subsequent chronologies have been developed with sub-periods (Gilman et al. 2014; Gilman and LeBlanc 2017), and tighter date ranges can be assigned to sub-periods due to ceramic micro-style analysis (Shafer and Brewington 1995), I stick with the more classic chronological sequence. I do not always have the benefit of associated ceramics, and in order to compare trends through time, this sequence based primarily on architectural style in the absence of more absolute dating of specific memory events proved to be the least problematic. I also prefer to discuss change in terms of centuries rather than defining or trying to incorporate new phases

that complicate an already complex picture. In the following paragraphs, I will detail the general changes and trends in Mimbres architecture, starting with the Early Pithouse period and ending with the Postclassic period.

Table 3.1. Associated Phases, Date Ranges, and Architectural Styles of Mimbres Chronological Periods.

Period	**Phase**	**Date Range**	**Architectural Style**
Early Pithouse	Cumbre	A.D. 200-550	Oval or circular pithouses atop knolls
Late Pithouse	Georgetown	A.D. 550-650	Circular pit structures
	San Francisco	A.D. 650-750	Rectangular pit structures with rounded corners
	Three Circle	A.D. 750-1000	Deep rectangular pit structures
Classic		A.D. 1000-1130	Masonry pueblo architectures with plazas
Postclassic	Black Mountain	A.D. 1130-1300	Adobe pueblos
	Cliff	A.D. 1300-1450	Adobe pueblos or masonry architecture

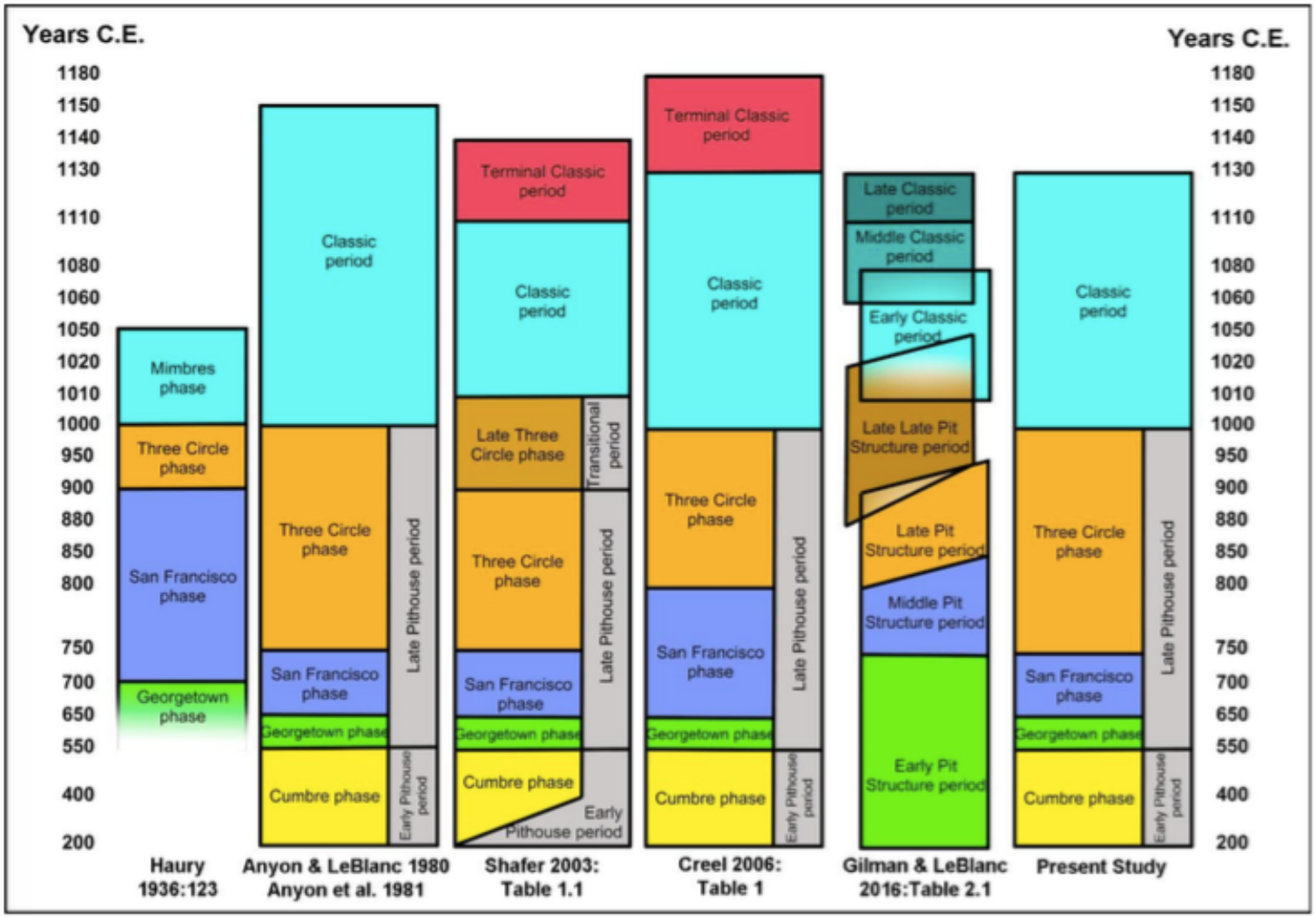

Figure 3.2. Various periods and phases of Mimbres regional chronologies (Russell 2016: Figure 3.2).

Early Pithouse Period (A.D. 200-550)

The Mimbres sequence begins with the Early Pithouse period. This period encompasses the earliest settlements with associated plain brown and later red-slipped pottery in the Mimbres region and dates to around A.D. 200 (Anyon and LeBlanc 1980; Diehl and LeBlanc 2001). The settlements of this period consist of small clusters of oval or circular pithouses that were located on higher landforms such knolls and mesa tops, possibly for defensive reasons (LeBlanc 1986, 1999). As they are located apart from areas of later and continued settlement, I will not discuss them further, because they offer no apparent contributions to either continuity or memory.

Late Pithouse Period (A.D. 550-1000)

The first observable shift in settlement location occurred between the Early and Late Pithouse periods (Figure 3.2), when groups moved from hilltop locales to the first terrace or bench above the Mimbres River and its tributaries (Anyon et al. 1981). Archaeologists view this as an indication of greater sedentism (due to an increased reliance on maize agriculture) and more pronounced ties for the purposes of land tenure and property rights to places of prime agriculture in the flood plain (Blake et al. 1986; Creel and Anyon 2003:84; Diehl 1996; Diehl and Minnis 2001; Minnis 1985; Schriever 2012). This period is also when we see the emergence of the black-on-white pottery tradition. Three to four phases make up this period and are characterized by specific pithouse shapes, depths, and pottery styles.

Georgetown Phase (A.D. 550-650). This short period lasting only a century is marked by a move to the first bench overlooking the flood plain. According to Haury

(1936), this phase is characterized by circular or D-shaped habitational pithouses, round/oval ceremonial structures, and the appearance of San Francisco Red pottery. Most likely, these structures were not occupied year around, but their location next to the flood plain suggests increased reliance on prime agricultural lands (Gilman and LeBlanc 2017; Minnis 1995).

San Francisco Phase (A.D. 650-750). Haury's (1936) designation of this phase was due to the first appearance of painted pottery in the region, Mogollon Red-on-brown. The dwellings consisted of rectangular pithouses with rounded corners (Anyon et al. 1981). It is during this phase that inhabitants first interred individuals, mainly infants without associated ceramics, in sub-floor burials (Shafer 2003:7). The shape of subterranean ceremonial structures changed from oval or round to more of a D-shape (Creel and Anyon 2003:74). Few other lifeway changes occurred between this and the preceding phase or until about A.D. 750/800 (Creel and Anyon 2003:84).

Three Circle Phase (A.D. 750-1000). This phase is distinguished by rectangular and square-shaped pithouses, some of which were later modified by blocking the entrances (Shafer 1995:26). Communal structures likewise became rectangular in form with large floor areas (Anyon et al. 1981). In the late A.D. 800s, remodeling and modifications to domestic pithouses became more common (Creel and Anyon 2003:84). During the Three Circle phase, potters produced Three Circle Red-on-white and later Boldface (Style I) and Transitional (Style II) Black-on-white pottery styles.

Populations grew rapidly as groups settled in communities year around to practice intensive maize agriculture (Blake et al 1986; LeBlanc 1983). LeBlanc

(1989:182) estimates that, during the Three Circle phase, occupation of the Galaz site may have had 60 contemporaneous pithouses, each housing a family. Because of the rate of population increase, it is at this time that large integrative social and communal structures were constructed for the good of the entire community or for nearby communities but possibly owned by certain founding households.

Toward the end of the period, many but not all integrative communal subterranean structures in use were intentionally burned (Creel and Anyon 2003:69). These fires were often intense, uniform, and therefore intentional. Often, the roofs were allowed to collapse, and then the walls were pushed in, resulting in the lack of fill between the floor and the roof and the roof and the walls. Dedicatory items (Walker 2002) such as shell, turquoise, or quartz (often broken) were placed within roofing materials and in postholes, and the central posts were removed sometimes before and sometimes after the burning stage of the retirement process (Creel and Anyon 2003:70-72). This prescribed phenomenon appeared to be a valley or even a region-wide practice that would have been very visible on the landscape (Creel and Anyon 2003:77). Mimbres groups did not rebuild these large integrative ceremonial structures and instead constructed plazas, large rooms attached to room blocks, and much smaller kivas, which prompted researchers such as Gilman et al. (2014) and Shafer (2003) to characterize this as a change away from the Great Kiva religion. However, even after this change in ceremonial architecture, the same spaces continued to be used through the Classic period as indicated by partial or direct superposition of corporate kivas over earlier communal structures and those

structures opening up onto Classic walled plazas (Creel and Anyon 2003: 81-82; Shafer 2006).

Transitional Period (A.D. 900-1000/1030). Using the work of Fitting (1972), Gladwin and Gladwin (1934), and Wheat (1955), Lekson (1978, 1988) added an additional phase to Haury's system. According to the Gladwins and Lekson (1988), the Mangas phase that precedes the Classic period is classified as small surface pueblo rooms with early painted pottery in the Boldface and Transitional Black-on-white styles. The best sites and data to support Lekson's transitional Mangas phase comes from sites in the Upper Gila Valley (Dycus 1997; Sedig 2015). To our current knowledge, most sites in the Mimbres Valley region except Mattocks show evidence of a similar Transitional period characterized by transitional structures between pithouse and cobble pueblo rooms. Sedig (2015:242) has suggested that the transition may have been more rapid in the Mimbres Valley region than in the Upper Gila. Shafer proposed dividing the existing Three Circle phase into Three Circle (A.D. 750-900) and Late Three Circle (A.D. 900-1000) phases, and the latter became his Transitional phase at the NAN Ranch site because of the variability in construction methods for pueblo rooms and the remodeling of earlier pithouses. The Transitional phase structures present at NAN Ranch (Shafer 2003; listed third from left in Figure 3.2) are defined as rooms with shallow sunken floors and pithouses that have been modified to have roof entry rather than ramp entry (Shafer 1995, 2003). These transitional structures might have been described as shallow pithouses elsewhere (Anyon 1980; Shafer 1995).

Pithouse-to-Pueblo Transition. Considered to be a pivotal transformation in architecture and social organization (but see Gilman and LeBlanc 2017), the pithouse-to-pueblo transition occurred between the A.D. 900s and early 1000s, during the Three Circle phase and Transitional period at NAN Ranch when physically separated subterranean dwellings were abandoned for above-ground contiguous rooms arranged in room blocks. Since the same sites where pithouses were built remained the prime locales for inhabitants constructing the new pueblo masonry architecture, and since these locales remained occupied for over six centuries (Creel and Anyon 2003:84), it appears that groups negotiated this transition in-situ. This change in architecture is important to consider, as architecture is often an essential way in which people are habituated to different sorts of social interactions and everyday practices.

The transition from pithouses to above ground pueblos in the Mimbres region during the pithouse-to-pueblo transition has been examined in numerous ways. These include population growth, intensification of maize agriculture due to improvements in irrigation technologies, a shift to social organization to corporate groups (Blake et al. 1989; Creel and Anyon 2003; Hegmon 2002; Nelson et al. 2006; Roth 2012; Shafer 2003), and a change in cosmology/ideology (Gilman et al. 2014; Shafer 1995; 2003).

As the nature and significance of this change is debated (Anyon and LeBlanc 1984; Gilman 1987; Lekson 1999; Shafer 1995), so too are the date and rate at which groups negotiated this transition. Sometime in the middle to late A.D. 900s and into the early or middle A.D. 1000s, people built pueblo rooms, and most people were living in them at the start of the Classic period (Gilman and LeBlanc 2017:22; LeBlanc

1983, Nelson 1999). Was this change rapid with little use of transitional architectural forms, or did it occur slowly over a century and consist of groups experimenting with intermediate architecture? Gilman and LeBlanc (2017:23) suggest that both scenarios may be correct. While transitional structures were not observed at Mattocks or Galaz (Anyon and LeBlanc 1984), they are recorded at NAN Ranch (Shafer 2003), and it is conceivable that some people living in the Mimbres region constructed intermediate dwellings while others remained in pithouses. Indeed, at Mattocks, inhabitants were still building and using pithouses like Room 410 during the Classic period (Gilman 2007; Gilman and LeBlanc 2017:25, 57-58). Due to the variations in architecture, both Shafer (2003:40-54) and Gilman and LeBlanc (2017:23) view this period right before the Classic to be one of dynamic changes in which household groups inhabiting these sites make different architectural stylistic decisions to negotiate the changes in social organization, ideology, and ceremonial organization and structures. Shafer (1995:25, 2003:40-54) has suggested that there was a series of parallel changes during the transition, including house form, hearth design, entrance type, storage, burial practices, and ceramics. He linked these changes and the presence of ceiling hatchways, slab-lined hearths, and subfloor burials with a multi-layered universe and passage to the Otherworld.

Classic Period (A.D 1000-1130). One of the busiest periods of construction is during the Classic period when the Mimbres region reached the height of its population (Blake et al. 1986; Shafer 2003:8). Likewise, the experimentation and refined execution in painted pottery designs reached its fluorescence during the

Classic period (Hegmon and Kulow 2005; Shafer 2003:7). Inhabitants built and lived in cobble and adobe mortar surface pueblo rooms arranged in aggregated room blocks. Long distance travel or trade brought in many exotics such as marine shell, copper bells (Vargas 1999), macaws, and Mesoamerican iconography (Gilman et al. 2014; Wyckoff 2009).

To some researchers, this period ends in the Mimbres Valley at the Terminal Classic around A.D. 1130 (Creel 1999:117-118; Hegmon et al. 1999; Shafer 2003) or a decade later A.D. 1140 (Shafer 2003, 2006). It is highly unlikely that this period ended long after the early 1100s. This Terminal Classic time frame is poorly understood and could be as short as a generation or as long as three (Gilman and LeBlanc 2017:54). The Terminal Classic is marked by smaller habitation structures with interior features less well constructed (Shafer 2003:8), and it is when many groups left sites that had previously been occupied for many generations.

Postclassic Period (A.D. 1130-1400). This period is marked by pronounced depopulation of the Mimbres Valley and eastward emigration and reorganization into smaller hamlet settings (Hegmon et al. 2010; Nelson et al. 2006). This depopulation and dispersal is evidenced by the cessation of Classic period cobble architectural style and the production of Mimbres Classic Black-on-white pottery (Anyon et al. 1981; Shafer 2003). Instead, non-local ceramics such as El Paso Polychrome are used. Hegmon et al. (1999) observe a shift in construction methods to adobe rather than cobble masonry walls. Gilman and LeBlanc (2017:53-54) also note that some of the Postclassic sites are in new and not previously occupied locales along the first bench of

the river in the southern part of the Mimbres Valley. Black Mountain phase (A.D. 1130-1300) in the southern Mimbres region is contemporary with and most likely related to the Animas phase of the southwest corner of New Mexico, the Casas Grandes Medio period in northwest Chihuahua starting around A.D. 1200, and the El Paso phase southeast of the Mimbres Valley proper (Gilman and LeBlanc 2017:54). According to Nelson and LeBlanc (1986), the Postclassic period also includes the Cliff phase (A.D. 1300/1350-1410/1450), but as no sites in the current study have occupations dating to this Cliff phase, it will not be discussed further.

Of the sites in the present study, only Galaz has Postclassic architecture in the form of a pueblo room block. Groups inhabited Galaz during or shortly after the Terminal Classic (A.D. 1130) when most people left the site, and they inhabited in two waves. The first consisted of the small reoccupation of at least two rooms (Rooms 15 and 84) that had been abandoned earlier in the Classic period. This occupation is defined by the presence of non-local and stylistically later ceramics such as El Paso Polychromes and the presence of intrusive burials that post-date the use of Rooms 15 and 84 in the North room block. The second wave of continued occupation by some population segment diverged from the first wave as it involved the construction of a U-shaped, 23 room pueblo. This pueblo associated with and somewhat overlay the Classic period Southeast room block but was oriented towards the Mimbres River (Anyon and LeBlanc 1984:144). The inhabitation of this room block most likely dates to the Black Mountain phase (A.D. 1130-1300) and may have been the construction by a group of the same people who continued dwelling at this locale.

Changes in the Ceramic Tradition

A regional ceramic seriation based color scheme, design elements, and design layouts associated with tree-ring dated deposits is described below. Early Pithouse period and Georgetown phase pottery produced in the Mimbres region is plain and undecorated. During the San Francisco phase, plain and San Francisco Red continue to be produced as well as Mogollon Red-on-brown (Anyon and LeBlanc 1984; Shafer 2003). The Three Circle phase has sequential painted ceramics including Three Circle Red-on-white, Boldface (Style I) and Transitional Black-on-white (Style II). The Transitional phase includes a mix of Transitional, Early Classic (Style III), and a style indeterminate between the two. I maintain the classic terminology regarding ceramic styles instead of Styles I, II, and III.

Boldface Black-on-white (A.D. 750-900; Shafer and Brewington 1995) has a brown paste with a white slip and bold curvilinear line designs that extend to the rim; it lacks any framing lines (Anyon and LeBlanc 1984; Shafer 2003). Transitional Black-on-white (A.D. 880-1020) is marked by the use of fine line designs bordered by bold lines (Shafer 2003; Shafer and Brewington 1995). Both Boldface and Transitional styles are dominated by mostly geometric designs, although some naturalistic images are present. Classic Black-on-white ceramics are a continuation of the Transitional style but are better executed and include a range of geometric and naturalistic designs.

The Classic style is distinguished by fine lines meeting fine lines, and the bowl interiors are bordered by one or more rim bands (Shafer and Brewington 1995). As design styles may have changed every generation or so during the Classic period

(Shafer 2003:8), Shafer and Brewington (1995:7) developed a methodology to refine the painted ceramic sequence further by dividing the Classic style into Early (A.D. 1010-1080), Middle (A.D. 1060-1110), and Late Classic (A.D. 1110-1130) micro-styles. Most archaeologists such as Hegmon (2002) and Shafer (2006:25) agree that it was during the middle of the Classic period (A.D. 1060-1110) that black-on-white pottery production hit its zenith in both complexity and execution of design. However, while this time is known for its great variety in both naturalistic and geometric motifs, both authors suggest that the combinations of motifs were painted within a relatively conservative or standardized design framework according to design tradition. Hegmon and Kulow (2005) showed that while there are many layout options available, most Classic artists use a four-section symmetry or central figure oriented structure. This may be an effect of fewer production locales during this time. Speakman (2013) concludes that Classic pottery production becomes minimal in the lower Mimbres Valley downstream from the NAN Ranch site.

Changes in the Mortuary Tradition

In this section, I will first describe the modal mortuary patterns and typical Mimbres burial attributes to give some background to those intrusive burials placed in earlier contexts. Next, I will discuss how the mortuary traditions changed through time. A diachronic view of interments allows for an examination of the relationships that groups living in the Mimbres region had with their ancestors or the deceased, and how the dead or ancestors were integrated into the world of the living (Carr 1995; Shafer 2003:135), both of which concern and impact how social memory is performed.

In the Mimbres region, most burials are generally single interments with the individual flexed or semi-flexed and lying on the side or back as seen in Figure 3.3 (Gilman 1980:263; Shafer 2003:146-147). While previous excavations have focused on areas of architecture, we do know that individuals were also interred extramurally (Anyon and LeBlanc 1984:174; Shafer 2003:155), perhaps more so during the Late Pithouse period (Shafer 2003). Some individuals were distinguished through cremation, and Creel (1989:316) suggests about 1.5-2.1 percent of the total burials were cremations. Often, they were in plaza areas (Creel and Anyon 2003:83). Some rooms with subfloor burials continued to be occupied by the household (Cosgrove and Cosgrove 1932:23; Haury 1936; Shafer 1995:32), while most others had been abandoned before people were interred below the floors or in the fill of core rooms (Shafer 2003). Ceramics were the most ubiquitous burial accoutrements, although archaeologists (Gilman 1990:460-461, 2006:74-75; Shafer 2003:149-150) have noted many other objects such as shell and stone (including turquoise) jewelry, chipped and ground stone tools, palettes, and copper bells.

Archaeologists (Bartlett 2013; Bradfield 1931:56; Livesay and Gilman 2017; Shafer 2003:138) have observed that, prior to the Classic period, mortuary vessels were commonly smashed and scattered over the burial. Late in the Three Circle phase and during the Classic period, there was an upward swing in bowls with a small puncture, a “kill-hole,” in the vessel bottom, and the subsequent placement of the vessel inverted over the head of the individual (Figure 3.3; Bartlett 2013; Shafer 2003:135-137). It is uncertain whether the latter is more common in the Classic period

or if, as Hegmon (2002:342) has suggested, it appears to be the dominant pattern because the Classic data are better known. However, at the NAN Ranch site, Shafer (2003:151, 158) has discussed many Late Pithouse period burials that contain vessels smashed and scattered in the fill. Classic period burials at this same site exhibit an altered pattern with 56 percent (n=92/167) of the subfloor inhumations in corporate cemeteries containing at least one "killed" vessel inverted over the head of the deceased (Shafer 2003:156). Livesay and Gilman (2017) have observed a change in mortuary practices between the time periods characterized by Boldface and Transitional Black-on-white pottery (around A.D. 880-950) with the pattern continuing into the Classic period (A.D. 1000-1130). The change involved a standardization with fewer number of vessels per burial and in vessel placement in relation to the deceased, and it was perhaps coeval with the non-replacement of the Great Kivas in the early to mid A.D. 900s but before or during the early part of the pithouse-to-pueblo transition.

Figure 3.3. Burial with a “killed” bowl inverted over the head (Shafer 1995:33, Figure 8).

In general, there is a shift at the Classic period from extramural burials to residential burials below the floors of rooms and fewer cremations (Shafer 2003). Researchers working at the Harris and NAN Ranch sites have explained this shift in mortuary practices as related to founding families and their concerns about land tenure as fully sedentary and agriculturally invested groups (Roth and Baustian 2015; Schriever 2012; Shafer 2003, 2006). Many scholars (Brody 1997:22; Crown 1994:221; Moulard 1984: xxvii) purport that inhabitants in the Mimbres region subscribed to an ancestor cult. Indeed, Shafer (2003) identifies multigenerational corporate cemeteries in ancestral core rooms at NAN Ranch. While he states that the creation of these cemetery areas maintained residential continuity, Shafer (1995, 2003) also argues that coupled with the placement of “killed” bowls over the head of the deceased, this shift

to intramural burials signaled a change in cosmology or ideology (see also Moulard 1984: xviii-xix).

Changes in Social Organization and the Evidence for Inequality

A shift in dwelling construction might have signaled a shift in how Mimbres society was organized and how it operated, as social, ideological, and economic changes are often negotiated at the household level (Gilman and LeBlanc 2017:25). Creel and Anyon (2003:69) note that a mix of organizational strategies could have been used both before and after the pithouse-to-pueblo transition. For example, although not evident at the Mattocks site (Gilman and LeBlanc 2017:467-468), corporate group formation and formalization is evident at the NAN Ranch, Harris, and Old Town sites (Creel 2006; Shafer 2003, 2006; Roth 2012).

Starting perhaps in the Three Circle phase, kin-based and co-residential corporate group development has been interpreted from the possible courtyard group at Old Town, similar to Hohokam courtyard groups (Creel and Anyon 2003:81; Fish and Fish 1991:159-160; Lucas 1996; Shafer 2003). Corporate group formation coincides with evidence for irrigation technology and increased residential stability (Creel and Anyon 2003:69, 86). Thus, this level of social organization was necessary to assert corporate group claims to the best agricultural plots and to have the labor necessary to maintain irrigation for agricultural intensification, and it is comparable to Adler's (1996) "primary resource access groups" (Shafer 2003:88). For Shafer (2003:153-159), this corporate group organization became formalized in and through the construction of Classic room blocks composed of room suites, small restricted-access kivas, and

rooms with many burials. Shafer (1990:100) identified corporate kivas or shrines as core rooms with multiple hearths and many intramural burials, and he suggests they may represent relative hierarchies of Classic room block residence groups. This notion is supported by Clayton's (2006) study of group access to more restrictive corporate kivas during the Classic period, in which she finds some inequality among certain corporate groups in terms of access to spaces where ceremonies were conducted. If social inequality existed, it did so most likely at the lineage level or corporate group level (Shafer 2006:18), and this helps inform the scale with which to examine social memory practices geared towards demonstrating primacy or antecedence.

However, previous studies on social inequality, such as Gilman's (1990, 2006) examination of burials at Mattocks, suggest that there are no significant and only subtle differences between burials and their associated goods among groups living at different room blocks. Some burials at the Mattocks (Gilman 1990, 2006), Galaz (Anyon and LeBlanc 1984:175), Swarts (Cosgrove and Cosgrove 1932:28), and Saige-McFarland (Lekson 1990:31) sites had substantially more goods than others, but as Gilman noted, there are no indications of standardized social differences. Likewise, subsequent investigations into the health and skeletal biology of residents of these sites in the Mimbres region revealed no significantly different standards of living among groups prior to or during the Classic period (Baustian 2015; Gruber 2006; Holliday 1996). To date, no evidence supports the notion that Mimbres groups or individuals were socially and materially differentiated in death, health, or access to

resources. Although Russell (2016) has hints of inequality but during the Classic period inequality becomes more fluid, changing, and ambiguous.

Because of the lack of vertically stratified burials, Creel (2006:38-39) investigated the location of certain individual interments to determine if burials in ceremonially important contexts distinguished certain individuals. Due to the placement of two burials associated with the floor of an abandoned Three Circle phase Great Kiva at Old Town, Creel (2006:40-41) has concluded that the individuals might have been ritual leaders that were marked in death not through material wealth but in their proximity to a ceremonially important place. Similarly, Creel and Anyon (2003:81-83) present evidence for ritual or ceremonial leaders based on the special or segregated burial locations either near floors or in or near kivas or adjacent plazas. Because of the preeminent ceremonially important quality of Galaz as opposed to other sites, an investigation of social memory through burials and architecture may contribute to a better understanding of both social organization and inequality for sites that may have functioned in different capacities for surrounding villages.

Summary

In sum, domestic and ceremonial architecture changed shape from round to more rectangular and increased in depth, until both domestic and ceremonial structures were moved to the surface. Later pithouses were remodeled and repaired more often, all of which indicate greater sedentism and more pronounced ties to places. The changes in domestic architecture during the pivotal pithouse to pueblo transition coincided and overlapped with the elaborate retirement of Great Kivas for

communal integration, the replacement of Great Kivas by smaller corporate kivas and plazas, the formalization of corporate groups, and the concomitant changes in mortuary behaviors evidenced by sub-floor inhumations. It is at this corporate group scale that I discuss, in the next chapter, my methodology for examining and comparing groups' social memory narratives inscribed through burial and architecture.

Given the changes in mortuary ritual and the increase in intramural burials in the Late Pithouse and Classic periods, the relationship the living to the dead may have changed and it would be interesting to assess whether a similar change occurred in the frequencies of remembering of the past for inhabitant groups at those times. Investigating social memory may be an additional avenue to explore social inequality and its ambiguity. Lastly, the reorganization of households into corporate group might have implications for which earlier places or pasts get remembered and which are forgotten or are later re-claimed. The changes in mortuary activities, coupled with the changes in domestic architecture, and the formation of corporate groups, suggest transformations in Mimbres life. By tracking the ways that groups performed social memory to construct group histories through places and ancestors we may be able to further explore social inequality through differences in access to the past. Lack of significant differences may suggest a social mechanism for communal group cohesion at a time of population expansion. Perhaps performing memory, even recent memory is part of the Mimbres ethos and informal identity.

CHAPTER 4
METHODS FOR UNDERSTANDING SOCIAL MEMORY PERFORMED BY GROUPS IN THE MIMBRES REGION

The methodology used in this dissertation is designed to examine and capture the operationalized displays, constructions, inventions, and contestations concerning how different corporate groups practiced social memory or kinds of memory and forgetting through time. It focuses on the tangible products and byproducts of the activities involved in living in and altering homes and inhabiting places that capture both everyday actions of memory making and tradition as well as more special and ritually heightened actions such as burials.

To explore potential differences in social memory, I assess physical archaeological features that are embedded and imbued with many social significances at three sites within the Mimbres culture area. Using an approach proposed by McAnany and Hodder (2009), I define material activities that result in the cutting, adding, or palimpsest creation of built stratigraphy that similarly involve the processes of memory-making, genealogy/history construction, re-making, and subversion, or erasure, avoidance, and forgetting. Specifically, I explore frequencies of later architecture superimposed over earlier structures and burials, architectural remodeling, filling of abandoned structures, dumping trash in abandoned rooms, razing and burning of structures, ancient removal and disturbances of burials, and the presence of later burials placed intrusively into earlier structures.

I will begin by briefly reviewing how past researchers such as Roth and Baustian (2015) and Russell (2016) have examined social memory and social organization scales

in the Mimbres region, and how I plan to build on these previous works in a holistic and comparative manner, using published and unpublished excavation reports and field notes. Next, I will outline my methodological approach and use of relevant ethnographic and archaeological resources from different societies and time periods to define the variables chosen for data collection and analysis. Following this, I will detail my dataset and the sites used, the histories of excavations and pothunting, and the different excavation strategies at these sites. I then define the residential groups and founding groups that will be used in the comparisons of frequencies of memory practices, with particular reference to how each material assemblage is exclusively positioned to address aspects of social memory and tradition at both the household and especially the corporate room block scale. Lastly, I describe my use of qualitative statistical significance testing in assessing when and where differences in the frequencies of memory making and forgetting activities occur within and between sites.

Mimbres Studies on Social Memory

Only two published studies specifically examine social memory for a site in the Mimbres region. Russell (2016) uses primacy and antecedence to examine domains of social inequality and how those domains shift through time. Roth and Baustian (2015) discuss social memory and memory practices at the Harris site, a Pithouse period site in the Mimbres Valley with no overlying Classic period occupation. The authors discuss memory within the contexts of lineage-based social power and material actions towards those strengthening those lineages. They identify founding households at the

site that are practicing social memory using the presence of uniquely "wealthy" child burials, which suggest they inherited rather than achieved their status. An additional line of evidence Roth and Baustian use is intrusive burials that stand out from other burials because they are in a seated flexed position or are physically "touching" earlier pithouse floors. Roth and Baustian document a few households that practiced a kind of social memory focused on antecedence, presumably for land tenure or primacy rights and access to the most productive agricultural plots (Flannery and Marcus 2012).

Roth and Baustian's study is intriguing and poses some interesting research questions. Are all household and corporate groups participating in similar practices with similar aims? What other kinds of memory-making practices are there in sites other than Harris, and for what purposes? Memorialization and commemoration, such as that observed by Roth and Baustian (2015), on the one hand pay tribute to the past, but they also present a picture of how participants think the future should look. I build on to their discussion of unique burials and architectural superposition. While I use both of the measures above, I also examine remodeling, burning, razing, filling, and many other measures to examine memory practices at each stage of occupation (occupation, abandonment, and post-abandonment. Without assuming land tenure to be the main motivation for these practices, and by using sites with Classic and Postclassic components, I explore the complicated ways remembering and forgetting of past occupations is played out across the landscape according to the ever-changing present.

Archaeological and Ethnographic Sources

Many of the variables that I chose for data collection and analysis were used in a cross-cultural model proposed by McAnany and Hodder (2009). Their approach seeks to examine how structured depositions can be interpreted in more social terms such as the development and performances of different histories and identities. Much of their data comes from two case studies, K'axob and Çatalhöyük in Mesoamerica and Turkey respectively. The present study is an application of some of McAnany and Hodder's (2009) proposed practices and activities to examine how those adding and cutting behaviors are played out on the landscape of three Mimbres sites from A.D. 550-1300. Evidenced in Table 4.1, both adding and cutting can relate to either remembering or forgetting or both, depending on the particular context. It is not always possible or appropriate to place a particular cutting or adding activity into only one category. For example, burning, caching, and filling may be remembering and/or forgetting. Each of these stratigraphy-altering activities belongs to a stage of structure use such as its occupation (caching), its closing and abandonment (burning), and the time after abandonment (filling).

Table 4.1. Stratigraphy-Making Techniques, Processes, and Interpretations Relating to Interpretations of Remembering, Forgetting, and Either/Both (modified from McAnany and Hodder 2009:8, Figure 3).

STRATIGRAPHY – MAKING TECHNIQUE	DEPOSITING (ADDING)	CUTTING (SUBTRACTING)	CUTTING AND DEPOSITING	REMOVAL
Material Correlate	Superposition Residential/ Pre-room Burials Burning Trash/Filling Multiple Floors/Remodeling	Burial Removal (Prehistoric) Burning Razing/Scouring	Remodeling Intrusive Disturbed Burials/Missing Crania	Burial Removal
Process	Raising Entombment/Retirement Concealing/Hiding/Hoarding Copying	Lowering Scouring Erasing	Continuing Inhabitation/Use Palimpsest Creation Returning/Remaking	Avoiding
Interpretation	Remembering Genealogy/History Building Memorialization Forgetting Renewing Dominating/Displaying Making Endure/Grow	Forgetting Cleaning Dominating Subverting/Destroying		Remembering Forgetting

McAnany and Hodder (2009:11) make an excellent point that, to a certain extent, the processes of adding and cutting that affect the stratigraphy are bounded and conditioned by what layers exist at the time of those actions. This contingency on what lies beneath can limit present and future actions and the manner in which they are performed. Thus, some inhabitants may be unable to construct Classic room blocks over the earliest Georgetown structures because the latter may be only present in one locale at a given site.

In recent years, many researchers have noted the striking parallels between the architecture and social organization of southwestern pueblos, namely Zuni and Hopi, and those of Çatalhöyük (Hodder 2006; Stea and Turan 1993; Steele 2007; Stevanovic and Tringham 1998). Indeed, the lineage memory groups discussed by Roth and Baustian (2015) seem very similar to the "history houses" described by Hodder and Pels (2010) as these groups dwell in rooms with multigenerational intramural burials suggesting household continuity. These history houses were often a series of superimposed dwellings directly on top of older buildings. Internal space was often organized similarly through time, with burials placed under the raised platform across many generations.

I would expand Hodder and Pels' (2010)) definition of superposition and household continuity to include cases of in addition to four walls being built on top of the footprint of earlier walls. For one thing, unlike the site Çatalhöyük in Turkey, domicile structures in the Mimbres region change from circular to rectangular through time, making it very difficult to directly build upon earlier wall surfaces. Considering

the pithouse-to-pueblo transition and changes in structure shape, I am less conservative in my definition of superposition. This definition change is the only one I make with regards to methodological application of the superposition concept and the example from Turkey.

Given the penchant for cross-cultural comparisons between these two areas, I am supported in my subsequent use of McAnany and Hodder's (2009) social memory measures for Çatalhöyük as viable and appropriate analogues to the Mimbres region. Indeed, it may be a best fit for the Mimbres region, as its ancient inhabitants also practiced intramural burial unlike other southwestern pueblo groups who traditionally buried their dead away from main room blocks (Creamer 1993; Steele 2007) or in middens (Ortiz 1969). Also unlike other pueblo sites, some Mimbres sites were occupied for over six centuries and produced complicated room histories of remodeling and reuse like those described at Çatalhöyük (Hodder 2006; Hodder and Pels 2010).

Using Ethnography to Evaluate the Relationship between the Living and the Dead

As Chesson (2001) rightly surmises, archaeology is in a rather advantageous and unique position to examine social memory using ethnographic studies to inform our interpretations of death and mortuary practices. I will first start with ethnographic studies Tlingit, and southwest groups such as the Hopi, that provide cross-cultural backdrops with which to examine the role that death and burial practices have in the creation, maintenance, or alteration of social memory practices. Next, I will discuss other ethnographic and ethnohistoric accounts of practices similar to those observed

in the Mimbres region to assist in understanding these practices in terms of social memory, antecedence, and parody of the ancientness of others.

In his seminal work, Kan (1989) describes how the Tlingit use the dead as a resource for the living (Chesson 2001:5) to reestablish or re-negotiate social order when a prominent or important member dies. By examining the final resting places of the dead, regarding the living, and to places of the past, we may begin to tease apart the complex interplay of the negotiation of the identities, memories, rights, responsibilities, and relationships with other corporate groups living in the Mimbres region. This suggests to me that burials can be conceived as intersections of the dead and living, of what was, what is, and what could be. In other words, they serve as an arena for the performance of identities, memories, and relationships depending on who is involved in the burial ritual itself and in what capacity (Chesson 2001:4). If, as Mills (2008) suggests, many people were involved in the process of producing goods that were placed with the deceased, then this is an incorporative process that brings disparate community members together. Similarly, the audience members (as defined by visibility of act and location - whether public or more restricted) may dictate the kinds of memory-making process and intended audience group. If, on the other hand, fewer people were involved or witnessed in the burial or depositional act, then we might assume that the process and meaning of those commemorative events may be different.

Using Ethnographic and Archaeological Sources to Interpret and Measure Significance(s)

Many southwestern historic and current cultural groups can give additional context and sometimes meaning to some measures. These sources provide insights regarding intramural burials and perceptions of the dead. Similarly, these sources inform the current study concerning the concepts of social memory performances through both antecedence and parody.

For example, intramural burials for Hopi infants was performed in the faith that they would be re-conceived and reborn to the house (Ellis 1968; Parsons 1939:71). These ethnographic accounts can also be useful in assigning possible significances or explanations of certain observed behaviors in the archaeological record. The assumption that I make for defining corporate groups through architectural units, is supported by Hopi ethnographic literature, which states that clan or lineage affiliation is observed through residential proximity to each other and earlier structures those same groups inhabited (Cameron 1999; Steele 2007).

Antecedence is another important domain that potentially governs some group depositional practices, and ethnoarchaeological sources can inform our conceptualizations and interpretations regarding it. Flannery and Marcus (2012) have described antecedence as a nearly-universal principle from which many forms of social inequality can emerge. Hopi antecedence focused on the order of clan arrival to the current village site (Bernardini 2005, 2008, 2012; Eggan 1950; Whiteley 1985, 1987). Similarly, the importance of antecedence is also documented for the Zuni (Bunzel 1932), the Tewa (Ortiz 1969), and other Eastern pueblo groups (Ware 2014).

Antecedence at the cosmological scale, known as cosmogony, is well described in Tewa literature (Parsons 1929; Whiteley 1987). Like Hopi, Tewa groups were socially ordered by when they emerged from the lower world to the present world and in terms of their arrival at the current village or site (Duwe 2011; Ortiz 1969; Parsons 1929). Groups may have had differential access to ritual knowledge because of these rankings. Thus, it is likely that practices related to the socially meaningful concept of antecedence are present in the material assertions of founder groups that have been at Mimbres sites the longest and may thus have had accesses to earlier times and places. In his recent dissertation, Russell (2016) uses architectural chronology, architectural superposition, remodeling, and intramural burial counts to examine social inequality in claims of antecedence and primacy among other households and lineage groups.

Another conceptual tool related to antecedence and contestations of the order is Bahr's definition of *parody* in native southwestern mythology. He defines *parody* as "a work that is based on another work but is cleverly different from the other and is silent about the other's existence" (Bahr 2001:588). Tewa groups perpetually disputed the actual cosmological order (Ortiz 1969) as did the Hopi clans (Courlander 1971). Bahr (2001:587) explains these contestations, not as contestations, but as a playful borrowing and compassionate telling of one's ancientness in reference to the ancientness of one's neighbors. Thus, it is not always outwardly apparent that a group is referencing another.

Using this perspective, similar memory-making activities that construct distinctly different genealogical histories for Mimbres founding and non-founding lineage groups alike can coexist. These Mimbres groups may differ in the way social memory or histories are created and recreated. This perspective also allows and works with performances of social memory visible by different audiences (household, lineage, community). Reported contestations of social order and the process of parody involve groups that have cultural historical ties to ancient inhabitants of the Mimbres region and are thus appropriate analogs for interpretations. The concept of parody is helpful to understand, interpret, and explain seemingly contradictory narratives created by social memory practices of certain Mimbres corporate groups.

Defining the Variables that Best Capture Memory

Adding Activities

Adding activities include adding structures above earlier ones (architectural superposition), adding rooms over earlier burials (pre-room burials), multiple floors, remodeling, filling rooms, adding trash to unoccupied rooms, and caching important items. These activities can create continuity or discontinuity with the physical remains of the past and can be indicative of both memory and/or forgetting depending on the context. The physical link between structures or features may signal continuity while the piling of earth may cover earlier places leading to forgetting, through the lack of association between surfaces or structures. Similarly, adding and building stratigraphy can be related to renewal or wiping the landscape slate clean to begin afresh.

Architectural superposition. I treat the physical stacking of architectural buildings (dwellings, store rooms, and communal or ceremonial rooms) as a binary attribute (present or not present), but also with a temporal aspect such as the temporal gap between architectural phases of the underlying and overlying structure(s). I further distinguish the type of superposition using the amount of contact and continuity with earlier structures. All three aspects can be quantitatively evaluated to identify differences in frequencies or depths of memory among residential groups. Superposition is not always all four walls being built on existing wall remnants or the exact reuse or organization of interior space between different occupation phases such as in the Çatalhöyük example (Hodder 2006). However, Shafer (2010:214) noted that for the NAN Ranch site inhabitants did follow a scheme of placing intramural interments away from the hearths and areas of the highest activity, which may suggest continuity in the organization of certain interior spaces. Continuity can also be maintained through many material means, such as the reuse of a central post hole, other posts, or a hearth by different generations, all of which have been reported in the Mimbres region (Anyon and LeBlanc 1984:64).

That said, I do recognize potential differences in superposed structures that may reflect real differences in knowledge or intimacies with previously occupied and abandoned structures or places. After delineating whether structures were superimposed or built over earlier structures, I categorize the type of superpositioning into one of three types: encompassing, bisecting, or touching/oblique superposition

(Figure 4.1). These types rank in order of the intimacy and direct association with earlier structures from most to least intimacy respectively.

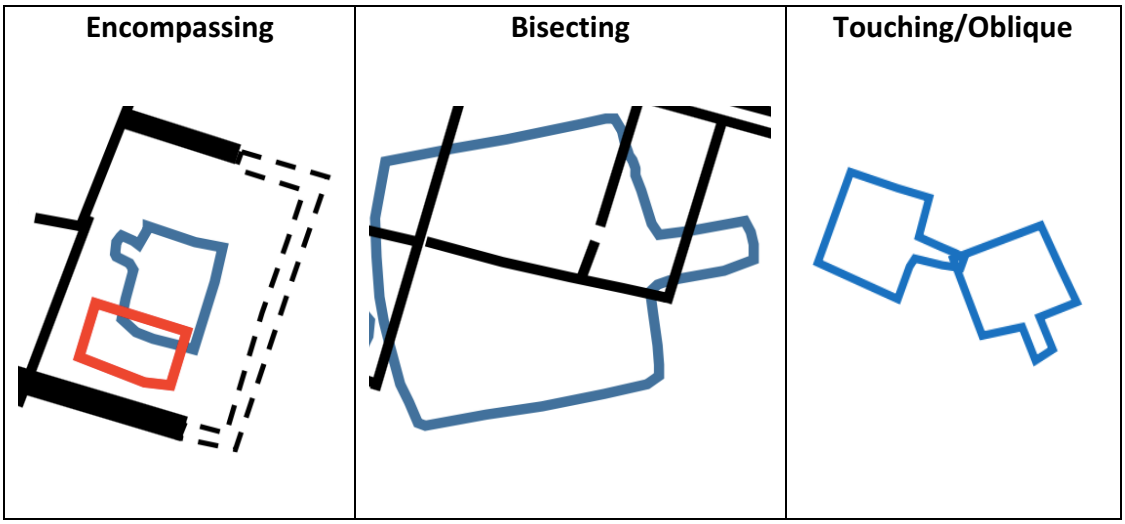

Figure 4.1. Examples of superposition types.

Encompassing superposition is defined as superposition that involves the later building mostly encompassing at least three sides of the earlier structure. This type also includes a structure that is built entirely within the confines of an earlier structure, with both structures often sharing some interior features. Bisecting superposition includes later structure(s) bisecting an earlier building with at least two points of contact. This is by far the most common type of superpositioning present at the Mimbres sites investigated, and often there is continuity in room function through time (i.e., a corporate kiva over a Great Kiva). Lastly, there is touching/oblique superposition where only one contact point is made between structure foundations or walls. This is probably the least significant form of superposition and may not always be an intentional reference or association with past places. In sum, intra-site groups

can differ in the relative frequencies of architectural superpositioning present, the types and strengths of those associations, and the elapsed time (gaps) between the occupations of the structures involved in the physical architectural stacking. I measure the elapsed time in numbers of architectural phases differences.

Pre-room burials. If later structures are built over or incorporate the remains of earlier structures, then the placement of these later structures appears meaningful in relation to those they superimpose. Similarly, the presence of earlier extramural burials could play a role in governing where and over what spaces a structure is constructed. Presumably, extramural burial was a more common practice during the Late Pithouse period than in the Classic (Shafer 2003:37). Therefore, the relative presence or absence of burials that may predate later rooms may be an additional line with which to examine continuity in a group's occupation of spaces and places. These burials are defined by researchers through soil changes and the looser burial fill and the point at which those changes take place at the top of the burial pit. Additionally, we can define much earlier burials through their depths and relation to floor and wall features. If there are burials that are very deep and covered with lots of fill before a floor surface was constructed, or if burials underlie and are disturbed by later walls, then we may infer they predated that structure. Pre-room burials are treated as a measure like architectural superpositioning that is either present or absent for any given room. There may be more unrecorded pre-room burials classified as contemporaneous with other intramural burials if no ceramics were present to indicate that the former are significantly older burials (Shafer 2003:146).

Multiple floors. The presence or absence of multiple floors offer an additional line of evidence to further tease apart social memory practices through the relative continuity or discontinuity of space. Adding floors onto earlier floors suggests an investment in continuously occupying the same space rather than allowing structures to fall into disrepair. This memory measure is treated as a binary presence or absence in terms of whether structures contained multiple floors. I also found it useful to distinguish between two and two or more flooring episodes in comparing efforts to maintain certain structures.

By floors, I mean discrete flooring episodes, not just re-plastering of the floor or patching the floor, because these latter are activities associated with renewal (Mills 2008) and are not necessarily related to memory. Re-flooring episodes often take place when a structure is renovated or remodeled but does not always. Groups that could continually invest in maintaining the same spaces over great periods of time, potentially for land tenure reasons, must have had both wealth and labor.

Remodeling. Similar to multiple floors and likewise part of dealing with structures falling into disrepair, I examine instances of remodeling through time based on relative frequencies of remodeling episodes. Differences in relative presence or absence or number of remodeling episodes might suggest different investment levels to keep certain structures functional and maintain them as physical links with the past. I infer the relative importance of some places from the continuity of activities in the structures themselves. Thus, according to this measure, a room that was remodeled at least once and does not change function suggests that more importance was placed on

maintaining the structure for present and future uses than one that was not remodeled and was abandoned, and another room built in a different place to replace it. I define remodeling to include only changes in the configuration of the roof (indicated by different posthole patterns), changes affecting the relationship of the structure to others, such as blocked doorways, or changes that would be brought about by alterations in the way the room functioned (pithouse with blocked entryway and vent).

Post-abandonment trash and room/pithouse filling. The post-occupational use of an abandoned structure as a trash dump may signal an end or a change in the function or significance of a particular built space. It is important to distinguish between trash dumped in after a roof collapsed and the structure was abandoned and trash used to fill a building to a certain level for later floor or structure construction. The former may denote forgetting more than remembering, while the latter might suggest an effort to ensure and maintain continuity in structures and space and may signify memory maintenance. The practice of using trashy fill in episodes of platform expansions is quite common in the Mayan region and signifies memory maintenance (McAnany and Hodder 2009:11). Filling with trashy fill at abandonment, can be done to conceal or entomb earlier places, potentially with a concern for maintaining continuity as opposed to razing (discussed later) before constructing later structures. Likewise, this practice can be viewed as wiping the slate clean as it obscures what is buried underneath.

Caching. McAnany and Hodder (2009:8) have argued that the deposition of objects can be interpreted as both hiding and concealing or entombment or as both remembering and forgetting, depending on the context. Objects can be deposited in foundations or postholes to animate, protect, and ensure longevity of dwellings during construction and occupation (Harrison and Buck 2004). Similarly, objects are left on the floor or placed in roof materials when structures are terminated or when a member dies (Creel and Anyon 2003:75-80; Walker 2002). I examine the presence or absence of caches or ceremonially important or exotic items for differences among room blocks and differences among sites when possible. This activity may be performed at any point before or during occupation or at abandonment and retirement of a structure.

Cutting Activities

The activities of burning, razing, and scouring described here can relate to the discontinuity of structures, features, and places of the past, as in razing. Similarly, these activities can involve removing items belonging to structures and households that signals continuity such as removing and reusing center posts or removing elements from ancestors. Some cutting activities occur during the termination process of structures, and although they destroy or take away structures or material assemblages, they are memorable events. Burning is an excellent example of this. Creel and Anyon (2003) suggest that the ritual closing and burnings of Three Circle Great Kivas would have been highly memorable and visible events on the landscape, as the smoke of the fires could be seen at great distances.

Razing/scouring. Although a possible effect of architectural superposition, razing and scouring of previous structure floors and walls is perhaps the strongest measure of forgetting in the current study. Perhaps the most obvious form of cutting is scouring and razing, the partial removal and complete destruction of an existing structure respectively. Structures can be razed to be built over or not. Regardless, this measure can be interpreted as erasure and forgetting (McAnany and Hodder 2009:10). It is equally important to determine which places are destroyed, whether to make way for the new or not, as it to see which places endure and are used or referenced. Razed and destroyed structures cannot be referenced in the future. I examine the presence and absence of instances of structure razing and scouring, comparing room blocks through time.

Burning. While ancient burning can be unintentional, it is often a part of structure termination or renewal. In parts of Neolithic Europe, burning was an intentional part of structure termination (Stevonavic 1997). Burning upon structure abandonment, whether to close the structure or transform its use, is a well-documented practice in the Mimbres region. Burning structures upon retirement was most intense in the Late Pithouse period but also occurred during the Classic period (Creel and Anyon 2003). Burning appears to have been important in closing both habitations and ceremonial structures. Creel and Anyon (2003) view many of the burnings of the Three Circle Great Kivas as closure of special or powerful places. Prior to burning, inhabitants often placed caches or dedicatory items, such as shell, turquoise, broken sherds or projectile points on the floor or in the roof. McAnany and

Hodder (2009:13, 17) show that burning can equally be a form of renewal for changing the function of the space, or because of a death of an important household or community member. Regardless, burning can be conceptualized as deliberate acts of memory formation or destruction (Bradley 2007; Thomas 2001).

In general, I examine the presence or absence of burning for each room in each room block at each site and between the Late Pithouse and Classic periods. For the Galaz and Mattocks sites, I distinguish between severely burned and partially burned structures, and I compare these types of burning and their respective frequencies among the room blocks. I assume that the fires of severely burned structures were intentionally set due to the uniformity of the burning.

I interpret burned structures as measures of both sealing and of erasure (forgetting) and of remembering. Burned structures that are subsequently left alone are most likely forgotten places, but structures built on top of burned structural remains or those burned structures that include intrusive burials signal a continuity in that those retired structures that might not be entirely closed to the living. I also argue that the act of burning creates a very visual and memorable event that is tied to a place, allowing it to be acted upon by future groups long after the burning took place.

Cleaning and salvaging prior to or shortly after abandonment. Like burning, there are a couple of activities as part of the termination process that might prove to be additional measures of social memory or forgetting. The practices of removing floor assemblages or central posts or dismantling a roof before a structure was

terminated or burned can viewed in several ways. These activities are inherently practical but can also be highly meaningful. For example, the Hopi have been documented as removing timbers or construction materials for reuse and cleaning the floors of material culture, pots mainly, on the eve of retirement of that structure (Ellis 1968; Mindeleff 1891:21-31, 62). It is meaningful that they chose to remove them and continue using these materials. Similarly, at Çatalhöyük, Hodder (2006, 2016) reports many structures that are cleaned and filled. Hodder argues that the earlier structures and any ancestors buried are preserved by the later fill and construction for posterity, but are sometimes later dug into for retrieval. For many groups, this cleaning and filling is part of the renewing process before later construction. Similarly, some Mimbres structures were closed, with termination rituals involving cleaning and removing of floor assemblages and construction materials (Creel and Anyon 2003; Gilman and LeBlanc 2017:103). If those materials were taken to be reused, their use in a new context would create continuity and a link with the past.

Ancient removal or disturbance of burials. An examination of burials removed or disturbed by ancient inhabitants is an additional line of evidence to explore social memory or forgetting and relationships with ancestors. These disturbances can happen at any time, but they often occur when recently deceased members are placed in areas already used as cemeteries. Cemeteries in the Mimbres region were used over many generations and often linked descendants with their ancestors in core rooms. Therefore, extant burials would often be disturbed when new burials were added. According to the cases studies used by McAnany and Hodder (2009:8), burials

were also removed and relocated to new contexts. We can infer this to be an action of avoidance and therefore forgetting because of the relocation. Alternatively, removal of remains or particular elements such as crania, a common practice in early Pre-Pottery Neolithic B groups (Hodder 2006:27; Kuijt 2001:3, 2008), may be an attempt to keep ancestors alongside the living and thus signals remembering. The latter might be the case if removed burials are then interred intrusively into another context. Like many other measures, I investigate the presence or absence of removals or disturbances of earlier burials.

As it is very difficult to assign a date to the event of disturbance, I discuss these events relative to the approximate date of the burial inferred from room dates, stratigraphy, and floor levels, and ceramic style of associated mortuary vessels. For instance, a Three Circle phase burial may have been removed later during the same phase, 100 years later, or any time during an occupation.

We can interpret disturbances by later burials in two ways. First, the frequency of disturbances and disarticulations by burials or other construction and excavation activities may suggest a disregard for the earlier burials and may signal a break in continuity with the past. Alternatively, we can infer the frequency of later disruptions by additional intramural burials as an indicator of the importance of continually demonstrating one's links with ancestors. Perhaps not surprisingly, I prefer the latter interpretation.

Adding and Cutting Activities

Activities that simultaneously cut and add to the stratigraphic palimpsests of landscapes are often associated with remembering. The most common activity that cuts first and then adds is that of intrusive burials, or burials placed within already filled spaces. Both retrieving of pieces of the past or ancestors as well as excavating to place descendants with their ancestors fit comfortably in this action category.

Intrusive burials. I agree with McAnany (1995) that the term residential burial is more inclusive than either subfloor or intramural and better reflects the context with an associated group that may have been living in that locale for a long period of time. Like residential burials, which also may be indicative of group efforts towards continuity across generations for land tenure and other social reasons (Chesson 2001; Hodder and Pels 2010; Kuijt et al. 2011; McAnany 1995; Roth and Baustian 2015), intrusive burials are placed intrusively create continuity with earlier contexts. Even though inhabitants cut into the stratigraphy of unoccupied structures, the added depositions of burials place the present alongside the past. These burials may involve different cutting depths and can be within the fill, rooffall, or near the floor of the earlier structure, as well as below the floor. Intrusive burials are a means through which inhabitants could physically lay a recently deceased individual within an earlier temporality and thus alongside the memories of people and activities associated with that space. As corporate or lineage intramural cemeteries in many core rooms were easily available (Anyon and LeBlanc 1984:182; Shafer 2003, 2006), the choice to place certain deceased members instead in abandoned habitation and ceremonial rooms is

significant. It is one of many methods to give the present continuity with the past, highlight a group's ties to a place, and demonstrate their rights or privileges through antecedence.

First, I examine how these significant and meaningful links were created by founding and later residential groups at each site through the relative frequencies of intrusive burials. Not all previously abandoned rooms contain intrusive burials, and some have more than one individual interred. For the most part, I took previous researchers' word for whether a burial post-dated its contexts, and many of those determinations hinged on the stratigraphic location for the top of the burial pits. The only exceptions not always referred to as intrusive burials by the excavators were un-plastered burials and disruptions in the patterns of flagstone floors. I considered burials left un-plastered at floor level to probably post-date the use of a structure as inhabitants would step into the soft fill of the pit, a point that Gilman and LeBlanc (2017:217) also make.

I also recorded and analyzed aspects of intrusive burial assemblages to explore qualitative differences in the burial goods and the way they were interred, and I compared them among room blocks at each site. I considered other related variables to ascertain why certain places were attractive and appropriate as repositories for some deceased individuals as opposed to intramural cemeteries below floors. The variables include the time spread from the structure abandonment to the date of the intrusive burial, the relative stratigraphic depths of the burials, the ages and sexes of interred individuals, the function(s) of rooms containing intrusive burials, the presence

or absence of accompanying ceramic vessels, the frequency of burials that occurred in rooms either overlying or underlying other rooms, and the frequency they occurred in rooms with non-intrusive burials. Are intrusive burials more likely to occur in rooms that were burned, contained other burials, or were later superimposed? Similarly, is there significant variation in the stratigraphic depths of the intrusive burials or differences in date of the burial and date of the earlier building? I will discuss each of these in turn below.

By examining the elapsed time span between structure abandonment and the placement of an intrusive burial, I hope to distinguish different performances and access to the past for social and residential groups. The length of time into the past one can access and demonstrate through a real or exaggerated connection to earlier times or places can be a lens with which to differentiate memory performance for the sake of antecedence or for other negotiations of identities at the household scale. By ascertaining the dates of structures through architectural shape and ceramic styles present and the dates of the burials through stratigraphy and associated ceramic style, I examine both the timings and frequencies of these practices. Differences arise between the intra-site narratives being inscribed through intrusive burials by familial residential groups. Not everyone had access to the distant past or the oldest occupied structures at sites.

If excavators took stratigraphic depth measurements of burials, sometimes they were from the ground surface and other times they might have been from the floors of superimposed rooms. Because of pothunting and other human activities, the

ground surface could change from one season to another and was not always a reliable or comparable measurement (Anyon and LeBlanc 1984:377). To circumnavigate the issues in reporting depth, I categorized intrusive burials relative to known stratigraphic units. Thus, intrusive burials were either in the fill/rooffall of abandoned structures, near the floor, resting on the floor, or below the floor. These different depths may reflect both the efforts of inhabitants to bury their dead and the overall significance of the referential act of citation. Does placing a burial near or below a floor of a long-abandoned room signal greater intimacy or continuity with the past than burying deceased members in the fill of the same structure? Are there differences in the aims of these practices at different depths?

Age and sex determinations are affected by poor preservation, multiple looting attempts, and disturbances during ancient times, such as using the same intramural cemetery over many generations. I examined differences in ages of the individuals in the intrusive assemblage between room blocks and between the Late Pithouse and Classic periods. Similarly, I investigated whether individuals of both sexes were interred intrusively in similar frequencies. It was assumed that an intrusive burial assemblage that consisted of both sexes and all age groups might have lineage connections and status instead of achieved status.

Partly due to differences in age determinations (see Anyon and LeBlanc 1984: 173; Shafer 2003:148, 166) and the general fragmentary and disturbed nature of many burials in the Mimbres region, I lumped adolescent and child into the same pre-adult category and labelled both as children. This choice was motivated by a desire to

ascertain whether both children and adults were intrusively interred, as well as to have a robust enough sample to perform chi-square significance testing. Even though low cell counts were still sometimes a concern, I chose to use infant and old adult (50 or older) categories, instead of examining only sub-adult versus adult ratios. Not only are infants the first age group to be interred below floors during the Three Circle phase (Shafer 2003:140), but infant intramural burial, possibly for the infant spirit to be conceived and reborn again, is reported for both the Hopi (Ellis 1968) and other Pueblo groups (Parsons 1939; Steele 2007). On the other hand, intrusive burials of old adults might be in places of which they had first-hand memory of activities or people who occupied those spaces. Thus, I was curious to see if those two special groups were more prevalent than adults in the intrusive assemblage. Further, the presence of all age groups, including infant, child/adolescent, adult, and old adult, placed intrusively into earlier rooms may suggest that intrusive burials are not an outcome of achieved status and may more likely demonstrate kinship or affinity with ancestors, real or exaggerated.

Like age, I wanted to determine whether sexes of intrusive burials had more to do with lineage affiliation than possible gender domains. I examined the intrusive assemblage for the ratio of males, females, and indeterminate sex to identify any apparent differences in how residential corporate groups may have performed and re-performed their own histories through intrusive burials. As sex can only be determined with confidence for individuals over the age of 15 using current published

standards of metric and non-metric criteria (Shafer 2003:166), differences only apply to the adult and old adult populations.

Room function. Just as age of a room may structure the decisions about where to inter individuals, so too may the function of the room. I examined whether there were significant differences in the function(s) of the structures containing intrusive burials among room blocks and sites. I mirrored Shafer's (2010) criteria for defining room function as habitational, ceremonial/communal, or storage. Based on previous studies (Anyon and LeBlanc 1984; Rapson and Gilman 1981), functional determinations were made in terms of room size in addition to the presence or absence of floor features such as formal hearths and artifact assemblages. Generally, communal or ceremonial rooms had larger floor areas and floor features such as sipapus, drums, or caches. Habitations rooms contained formal hearths and sometimes subfloor burials and storage pits and were often attached to other habitation and storage areas through interior doorways. Storage rooms were often smaller in floor area and accessible only through a connecting doorway to a habitation room.

Burial contexts and associations. The remaining variables of vessel presence and absence in intrusive burials, intrusive burials within or not within superimposed contexts, and intrusive burials alongside other burials contemporaneous with the original use of the structure are to give additional context to the intrusive burials. I was curious whether intrusive burials did contain associated ceramics. Ceramics from different periods, even within the Classic period, have distinctive styles. Could the styles of later bowls put that intrusive burial at odds with their placement in burials in

earlier rooms? As the goal of intrusive burials is to physically link the present with the past, was the possibility of a bowl being anachronistic with the place and temporality of the interment context enough to prevent the inclusion of bowls with intrusive burials? As both intrusive burials and architectural superpositioning are related practices of social memory and referencing the past, it follows that I could investigate continuity by combining those lines of evidence. That is, are intrusive burials more likely to be interred in rooms with long histories of superposition and intergenerational interments similar to those observed by Hodder and Pels (2010) at Çatalhöyük or Shafer's (2003) Mimbres corporate cemeteries? This variable may help tease apart and identify instances of referencing old and known associations repeatedly, or those inventing or establishing new links with the people and places of the past.

Mimbres Sites Used

For the present study, I examined three sites in the Mimbres Valley proper (Table 4.2, Figure 4.2). Galaz, NAN Ranch, and Mattocks are three of 14 pueblo sites in the valley with over a hundred rooms, and some rooms and pithouses were recently excavated using modern archaeological techniques (Gilman and LeBlanc 2017:459). Mattocks was chosen because it is the best dated Mimbres site, but the site also provides a good comparison to both NAN Ranch and Galaz. Differences occur in the occupation dates and site importance. The initial occupation of Mattocks is later in the Classic period than either NAN Ranch or Galaz, and Gilman and LeBlanc (2017:459) characterize it as "ordinary" as opposed to the Galaz ceremonial complex (Creel and

Anyon 2003). Mattocks lacks structures that date from A.D. 650-750, and this discontinuous occupation of the site may suggest a different developmental trajectory than for some Mimbres sites. Different occupational histories have implications for the inhabitants' relationships to older places and how they performed social memory. If many earlier structures did not exist, then there may be unequal access to them, or they may have been used more intensively for memory making activities.

Table 4.2. Sites Used in the Analysis, References, and Numbers of Structures and Burials.

Site	**References**	**Number of Excavated Pithouses and Pueblo Structures**	**Number of Burials**
Galaz	Anyon and LeBlanc 1984	162	995
Mattocks	Gilman and LeBlanc 2017; Nesbitt 1931; Mimbres Foundation unpublished excavation notes	95	199
NAN Ranch	Shafer 1978, 1980, 1981, 1983, 1985, 1987, 1988, 1990, 2003	116	237

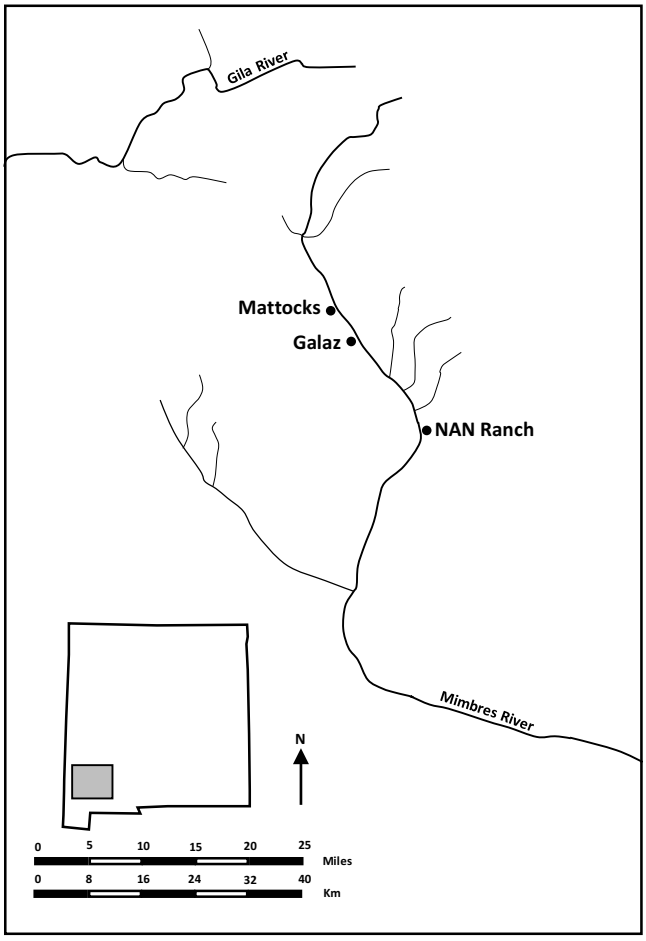

Figure 4.2. Map of the three sites used in this study.

Site Records and Excavation Histories

NAN Ranch. The NAN Ranch site contains three discrete room blocks comprised of around 75 Classic rooms overlaying a substantial group of Three Circle phase pithouses and transitional sunken floor structures. NAN Ranch was first investigated by the Cosgroves in 1926 during which they trenched and exposed walls of nine rooms and excavated as many as burials but did not circulate an excavation report (Shafer 2010:204). Later an avocationalist, Virginia Wunder, dug two rooms (48 and 58) in the East room block (Shafer 2003:17). Shafer and his Texas A&M University

crew started excavations again in earnest in 1978, but the site was episodically pothunted between the two excavations in the 1930s-1940s and the 1970s (Shafer 2003:17). The West room block is thus not part of the present analysis due to the severity of historical disturbances. Surprisingly, Shafer and his crew, working from 1978-1989, except in 1983 and 1988, found most of the East room block and all the South room block more or less intact. I rely heavily on burial and room data derived from these two room blocks.

Galaz. Galaz, a multi-component site of nearly 200 rooms, was excavated by three different expeditions, each with vastly different goals, methodologies, and rigors of documentation. In 1927, the Southwest Museum of Los Angeles (Anyon and LeBlanc 1984:10-12) excavated many Classic pueblo rooms and four pithouses on the northern end of the site. Just two summers later, from 1929-1931, the University of Minnesota led by Jenks excavated a large portion of the site, nearly 140 structures, including kivas, across the site. Little scientific excavation was conducted until the Mimbres Foundation excavated some of the pithouses in 1975 and 1976 (Anyon and LeBlanc 1984).

The two earliest projects were primarily interested in obtaining whole vessels as museum specimens and much less in understanding the sequences of change at the site. They thus followed procedures compatible with excavations conducted at the time. While these early investigations do not allow for direct comparison between room blocks at the same level of detail as the Mimbres Foundation data, since many important details are missing from the materials, they do add to the overall picture of

the site. And, as I stated above, the Southwest Museum and University of Minnesota excavators did notice and appropriately record pueblos superimposed over pithouses and which materials came from which, although some of the notes from the Southwest Museum project have been lost (Anyon and LeBlanc 1984:11). While there is some ambiguity caused by the numberings of the superimposed floors, and while the University of Minnesota project did not always excavate outside the original pueblo floor footprint (Anyon and LeBlanc 1984:15), their data, although not ideal, are still suitable for my purposes in terms of understanding the frequency of structure superposition.

During the expansive University of Minnesota excavations, there was an attempt to capture the same burial data for each burial encountered (Anyon and LeBlanc 1984:16) and to screen to recover any associated goods, thus making the burials as comparable a dataset as possible, considering the poor preservation of many burials in the Mimbres area. As Jenks and his Minnesota students were mainly interested in painted vessels, the data may be biased away from more utilitarian wares and incomplete artifacts that were not near the floors.

When the Mimbres Foundation started work in 1975, much of the Classic pueblo had been destroyed by bulldozing. Thus, they focused their efforts on sub-surface pithouses beyond the bulldozed areas that were still intact (Anyon and LeBlanc 1984:18). By placing backhoe trenches closely spaced in areas most likely to have pithouses and near the bulldozer cuts to locate these undisturbed structures, the Mimbres Foundation most likely recovered and recorded many of the remaining

earlier structures at the site. Their findings and focus on the pithouses is integral to better understand the sequence and superposition of later structures. Thus, I concentrate more on the Mimbres Foundation excavations of pithouses and the knowledge they gleaned from those earlier field projects notes (Anyon and LeBlanc 1984).

Mattocks. The Mattocks site is comprised of about 180 Classic rooms formed into about seven or eight room blocks over two earlier pithouses. Paul Nesbitt of Beloit College in Wisconsin first excavated the Mattocks site. In the first two years of work at the site 1929 and 1930, his team excavated around 61 structures and 206 burials, but they took few field notes, and not all burials were numbered or assigned to rooms (Gilman and LeBlanc 2017:30). Like his peers, Nesbit was focused on understanding the cultural history of the people who lived at the site, and his excavation and collection strategies reflect this. While Nesbitt noted that his crew started screening, he later stated that they found it unproductive and stopped and subsequently screened nothing, including burials. Instead the focus was on recovering whole vessels from inside rooms, and very little extramural excavation took place except to locate rooms (Gilman and LeBlanc 2017:31).

The Mimbres Foundation research design and subsequent excavations in the 1970s had to contend with the pothunting for Mimbres painted bowls that occurred before and after Nesbitt's visit. Indeed, the project can be characterized as a salvage project to rescue what information was left before the site was completely destroyed by looters (Gilman and LeBlanc 2017:32). Excavation for undisturbed Classic and

superimposed earlier pithouses began in 1974. Gilman and LeBlanc (2017:35-36) note that they started in the 200s room block as it was one of the largest and had been previously disturbed by both pothunting and Nesbitt's efforts. In the first few field seasons, their goal was to find undisturbed structures, and so excavators shifted focus to the 100s and 400s room blocks, while continuing work at the 200s room block. Both the Mimbres Foundation excavators and their subsequent reanalysis of Nesbitt's findings demonstrate that neither did much extramural excavation (Gilman and LeBlanc 2017:482). It is for the above reasons that most of my data and analysis focuses on the work performed by the Mimbres Foundation. See Gilman and LeBlanc (2017:27-32) for more complete discussion of the field seasons from 1974-1977, and the short 1979 fifth season that tested Unit 213, the Great Kiva.

Defining the Scale and Corporate and Founding Groups

As much of this dissertation is focused on how different social groups were actively adding and cutting the landscape in memory making processes, I will first address why I chose the supra-household scale. This scale is composed of aggregated households, as represented by room blocks, whose inhabitants occupied over generations, and it possibly represents corporate group organization of related and co-residential households that share common economic interests (Shafer 2003:88-89).

NAN Ranch may have multiple households in the East room block (Shafer 2003) as did room blocks at many other sites, but a study of social memory practices at the household scale would not have been possible using the adding and cutting measures I outlined above. For one thing, it is difficult to know which households and room suites

were contemporaneous even with chronometric dating and the bonding and abutment of walls, as not all rooms can be absolutely dated or have overlapping date ranges. For another, the looting and early excavations affected rooms and households at the sites as looters are drawn to large rubble mounds. Therefore, I examine contemporary corporate groups instead of households.

Next, I will briefly describe and define each spatially distinct corporate group and founding group. A founding group is determined from the chronology of the architecture. Earliest structures often denote founding from non-founding groups. Often these founding groups grow into later corporate groups. In this region, pithouse social groups are difficult to define, and Mimbres pithouses often do not form recognizable courtyard groups like the Hohokam with the entryways facing each other or a shared open space (Creel and Anyon 2003:81; Fish and Fish 1999:159-160; Lucas 1996; Shafer 2003). Like my predecessors, I initially focused on the easily identifiable Classic room blocks that fill discrete places on the landscape. These room blocks are composed of contiguous rooms that were built as needed and were probably not all occupied contemporaneously (Gilman and LeBlanc 2017:275; Nesbitt 1931). Room block architecture is sometimes indicative of co-resident group structure most likely related through a corporate group (Creel 2006; Shafer 2003 153-159, 2006:18-28). Corporate group formation coincides with evidence for irrigation technology and increased residential stability (Creel and Anyon 2003:69, 86). A prime example of such a lineage or corporate group is the South room block at NAN Ranch (Shafer 2003) which room dates, doorways and abutting patterns suggest was built and occupied in

five sequential construction phases (Shafer 2003:93). For Shafer (2003:153-159), this corporate group organization became formalized in and through the construction of Classic room blocks composed of room suites, small core restricted-access kivas, and rooms with many burials of all ages and sexes used for many generations.

Thus, Classic room blocks provided the base social organization at the appropriate scale to investigate how founding and non-founding groups performed social memory through time. I lumped previously occupied pithouses that date to earlier phases into these pre-existing Classic groups based on spatial proximity to the closest room block. As many groups demonstrate spatial continuity through time (Roth and Baustian 2015:254; Russell 2016:51), and if the groups responsible for the pithouse structure remained at the site, we may assume that they contributed and resided within one of those room blocks. Presumably but without supporting DNA evidence, residents built pueblo rooms near the locations of their pithouses. For my purposes of comparing groups through time, the proximate location and the small size of some datasets used in the statistical analysis were a bit of a constraint, as they could lead to false positives. These factors were a primary incentive to lump pithouse and pueblo rooms into fewer but larger groups with larger datasets of activities for each group.

NAN Ranch Corporate and Founding Groups

Shafer has defined three distinct room blocks at the NAN Ranch site (Figure 4.3) that may have housed corporate groups, composed of one or many households. Due to the large size of the East room block, it probably housed many separate

households. These eastern household suites were inferred primarily through rooms connected by interior doorways with at least one ceiling entrance and at least one hearth (Shafer 2010:207). Because the households Shafer defines are in the southern end of the East room block and many, such as the 55 and 60 room suites, have little information concerning the variables listed above, any investigation of the household scale would have limited comparability. This constraint was compounded by the presence of ceremonial and storage rooms not definitively attached to any particular household suites that were either remodeled, burned, or contained intrusive burials. It becomes difficult to justify the lumping of those unattached but important rooms to any one group. Additionally, even using wall bonding and abutment, it is difficult to determine which households were contemporaneous to each other or the suite affiliation of several rooms (Shafer 2003:107). It is for these reasons that I chose to examine the structures in the East room block as a single architectural unit of one or more corporate group. The South room block represents as single lineage or corporate group although perhaps not a founding one.

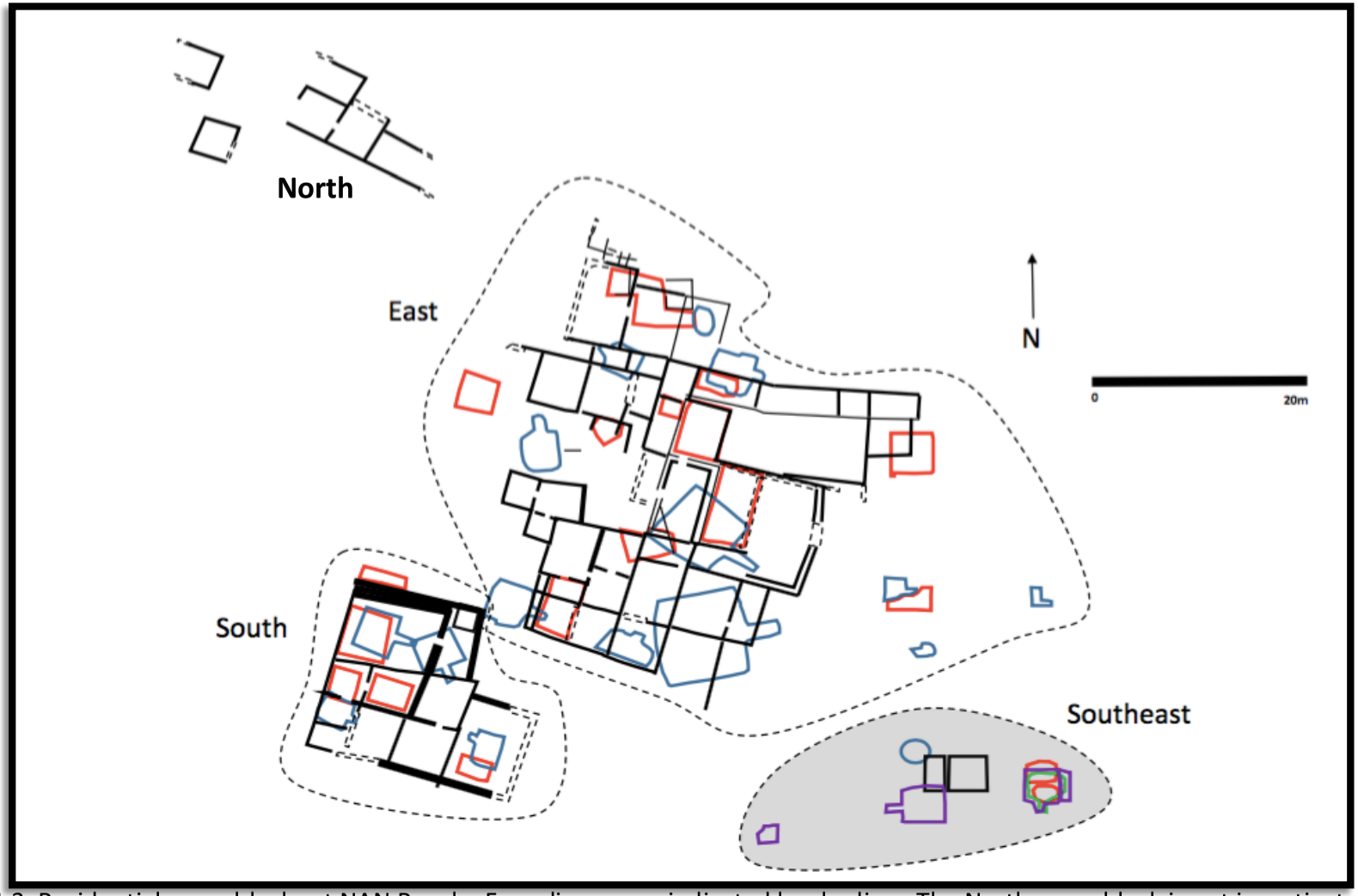

Figure 4.3. Residential room blocks at NAN Ranch. Founding group indicated by shading. The North room block is not investigated due to the degree of pothunting. Georgetown phase structures (A.D. 550-650) are marked in green, San Francisco (A.D. 650-750) in purple, Three Circle (A.D. 750-1000) in blue, Transitional (A.D. 900-1000) in red, and Classic (A.D. 1000-1130) in black

I retain Shafer's East and South room block designations and add the two isolated rooms and earlier pithouses to the Southeast of the East room block as a third (Southeast) room block group (Figure 4.3). This Southeast group is the only locale with Georgetown and San Francisco phase structures, it has great continuity in space to the Classic period, and it may represent a founding group. Gruber's (2015:159) research on pottery painting work groups gives support to the differences between the East and South room blocks, as they both belong in separate production clusters with different frequencies, combinations, and layouts of zig-zag and stepped painted pottery motifs.

Lineage households evolved, some occupying the same space through time such as the South room block, while others split or joined other prime lineages or corporate groups, and some such as the Southeast room block did not survive to the end of the Classic period (Shafer 2003:107). As a founding room block, it is possible that the Southeast group physically or socially joined the East room block sometime during the Classic, or was abandoned before the end of the Classic. Evidence for this includes the removal and possible reuse of some of the wall construction stones from Rooms 92 and 93, which indicates that they were abandoned before the end of the Classic period. Thus, it is not always clear how to compare lineage groups separately when they are hard to identify on the landscape. It is for this reason that examining corporate groups evidenced by spatially discrete room blocks is the preferred scale of analysis.

Galaz Residential and Founding Groups

Anyon and LeBlanc (1984) use the term room clusters instead of room block intentionally to note belongingness through proximity even if structures are not physically connected. I combined some of Anyon and LeBlanc's original groupings due to the small size of each data set (Figure 4.4). Because of its location near pithouses that lay just outside it, my North room block includes Anyon and LeBlanc's (1984) small Northeast room block, and similarly my Southeast room block includes the disarticulated East room block and the Anyon and LeBlanc's South room block. At Galaz, the Postclassic room block is superimposed over the Southeast room cluster, and so I included it and subsequent data into the frequencies and diachronic comparisons of superpositioning for the that room block. I refer to it as the Postclassic Southeast room block.

The founding group for Galaz is likely associated with the North room block and is indicated by the shading on Figure 4.4. This area encompasses three of five Georgetown structures and two superimposed San Francisco structures that date earlier than other pithouses at the site, all of which support this locale as the first place of continuous settlement during the Late Pithouse period.

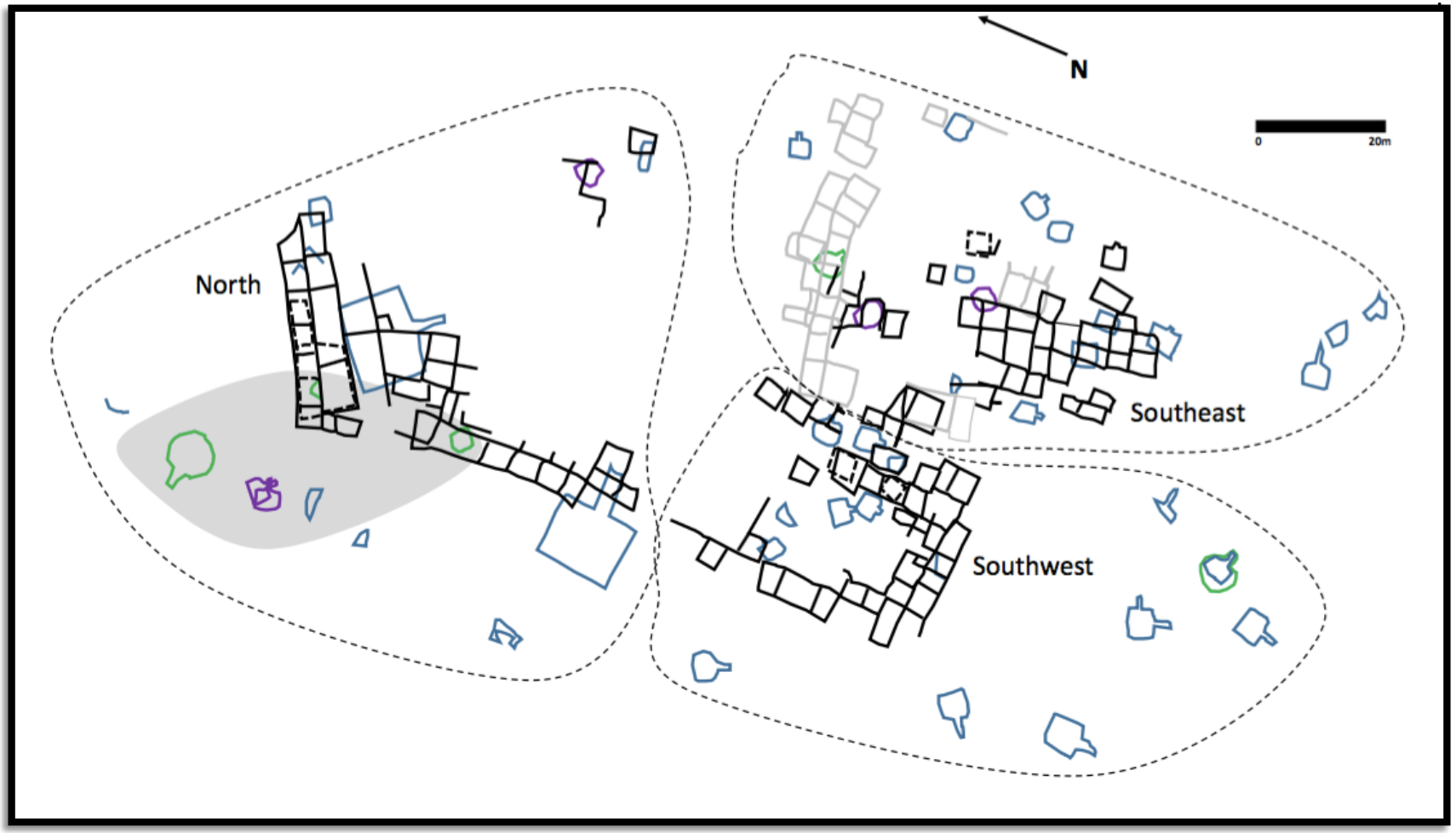

Figure 4.4. Residential room blocks at Galaz. Founding group indicated by shading. Georgetown structures (A.D. 550-650) are green, San Francisco (A.D. 65-750) is purple, Three Circle (A.D. 750-1000) is marked in blue, Classic (A.D. 1000-1130) is black, and Postclassic (A.D. 1130-1350) is in gray

Mattocks Residential and Founding Groups

While there are no clear lineage cemeteries, corporate kivas, or ancestor shrines present at Mattocks (Creel and Anyon 2003; Gilman 2006:73; Gilman and LeBlanc 2017:421) researchers do suggest that each room block was built and lived in represents a household. Certainly, this is the case for the 100s and 400s room blocks with 20-25 and 10-15 rooms respectively (Figure 4.5; Gilman and LeBlanc 2017:264). As the 200s room block is a little larger, it might have housed up to two families during its occupation. This household was most likely a (or the only) founding household due to association between Pithouse 286 and Room 286 built almost immediately after the pithouse was retired, and based on the speculation that the group built and may have owned the nearby Great Kiva (Gilman and LeBlanc 2017:123-124). Gilman and LeBlanc (2017:272) suggest that a slightly earlier start date could account for the 30 rooms in the 200s room block, and they maintain that it is possible to have housed only a single family for a longer period of time.

As many as eight room blocks are present at Mattocks, but I primarily focus on the 100s, 200s, 400s and structure 80b of Nesbitt's Southeast group because of the detailed information provided by the Mimbres Foundation excavations (Figure 4.5). I use and do not change groups proposed by the Mimbres Foundation and Gilman and LeBlanc (2017). These groups are supported by the results of design analysis on Mimbres Classic bowls and differences in pottery painting working groups as reported by Gruber (2015:137). Both Pithouse 80b in Nesbitt's Southeast group and the 200s room blocks are considered to be locales of founding families based on cutting dates

and pottery design styles. It is possible that after Pithouse 80b was built the site was not occupied continuously until the Three Circle phase (Gilman and LeBlanc 2017:472). This break in continuous settlement may affect how Mattocks groups remembered their past(s).

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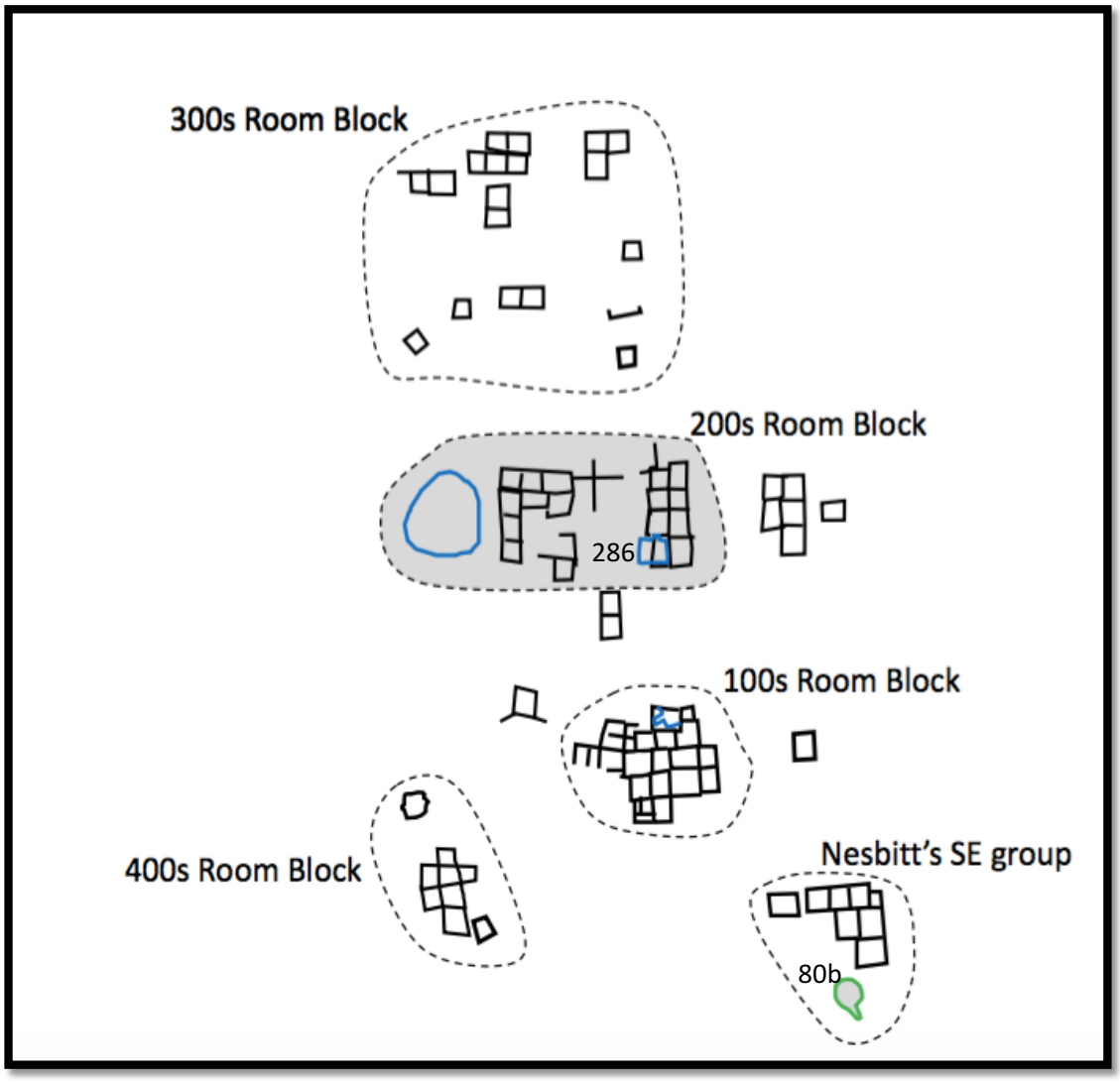

Figure 4.5. Residential room blocks at Mattocks. Founding group and earliest structure indicated by shading. Structures outlined in green date to the Georgetown phases (A.S. 550-650), Three Circle phase (A.D. 750-900) structures are outlined in blue, and Classic (A.D. 1000-1130) are shown in black.

A Statistical Approach to Mimbres Memory Practices

This section outlines a multi-step approach to determining statistically significant differences between residential corporate groups through time using the social memory measures outlined above. Statistically significant differences between room blocks might denote different kinds/purposes of memory performances by various lineage or corporate groups, or memories performed in slightly different manners. The first step in each analysis was to look at descriptive statistics such as histograms and percentages in order to discern modal patterns. Those patterns were then further explored through non-parametric Pearson chi-square testing of observed versus expected values. I used chi-square tests for two reasons. The first is that it is the only appropriate test to compare the nominal nature of the majority of the data. Secondly, because it works for any number of categories of an overall sample. Thirdly, because this type of test relates changes in frequencies without involving means and standard deviations, it is less affected by outliers (Drennan 2010:191).

Chi-squares were used both for understanding statistically significant spatial patterns within and between sites as well as temporal trends in the frequencies of certain memory practices. Each social memory measure that involved adding or cutting was tested at the site level. In other words, all room block frequencies were compared to each other regardless of the date of the events. Subsequent post-hoc pair-wise chi-square comparisons were conducted if at least one of two provisions were met. The first provision that prompted further statistical testing was if the site-wide chi-square p-value passed the classic alpha threshold of $p<0.05$. The second

condition was if the observed table counts of the activity for the site was greater than 20. Either way, if the cell-counts trended really low, Fisher's Exact Test was also run.

Some statisticians might object to two of the methodological choices, but both are defendable given the goals of this analysis. First, some might object to running any post-hoc tests if the overall chi-square test is not significant, however this caution is not universal (i.e. McDonald 2014:59-60, Hsu 1996:177). The concern is that running post-hoc tests without an overall value of significance risks a higher false positive rate. However, the global chi-square and pairwise chi-squares ask different question about the data. The global chi-square tests that all of the categories are independent, while the pair-wise tests are looking at the interactions of just two pairs of categories. This means the post-hoc pair-wise tests are more focused, so while the false positive rate will be higher, the false negative rate will be lower. Second, when conducting post-hoc tests, such as the pair-wise chi-square, some researchers favor using a Multiple Comparison correction such as the Bonferroni adjustment. These adjustments are done because as the number of comparisons increase, the chance of a false positive also increases. However, as Perneger (1998) points out, these adjustments are not rooted in sound statistics and will increase the false negative rate. Thus, both of these analysis decisions are designed to decrease false negative rates, but potentially increase false positive errors. For my purposes, this is an acceptable trade-off because the goal in this stage of analysis is to identify candidates for further interpretation. No single significance result is analytically useful unless it is also confirmed by other lines of evidence.

Effect of sample size is an issue when conducting and interpreting chi-square p-values, and small sample sizes can lead to false positives. Drennan (2010:189) notes that, when using small samples, we run a greater risk of getting a large difference between two small samples purely based on the vagaries of random sampling. There is also a much higher chance that a single changed or mistaken classification of the data could have a major impact on the results.in whether-realis Generally, I took a less conservative approach to cell counts with expected values as low as one (Drennan 2010:14), but I do note when a chi-square test is suspect due to low cell and expected counts. However, the JMP program I use to perform all my statistical analyses automatically performs a Fisher's exact test if the expected values of a chi-square are too low. This test is a good companion or alternative test to chi-squares as it is a direct calculation of the significance probability, and there are no requirements concerning cell counts (Drennan 2010:192). Thus, my data being what it was, and with the above understanding of significance testing ambiguity, I tried to be thoughtful in how I define significances.

Finally, my reporting of statistical frequently does not just stop with a binary significant/non-significant result because this masks a lot of information that the p-value is providing. Instead, in the results and analysis chapter summaries in Chapter 5 and 6, I supplement the classic 0.05 alpha threshold and use Drennan's (2010:159) significance descriptions of p-value meaning (Table 4.3). For example, a p-value of 0.05 is fairly unlikely to be solely the result of random sampling, whereas a p-value of 0.001 is extremely unlikely to not be the result of an additional factor. For the most

part, this qualitative presentation of differences is to illustrate only somewhat significant and very significant differences.

Table 4.3. Summary of Contrasting Approaches to Significance Testing Using Intrusive Burials as an Example (Drennan 2010:159, Table 12.3).

Significance testing as an effort to reject the null hypothesis		Significance testing as an effort to evaluate the probability that the results are indistinguishable from the vagaries of random sampling
The difference observed between the intrusive burial assemblage of North and Southeast room blocks at Galaz is less than what would be expected from the vagaries of random sampling. True or false?		How likely is it that the difference observed between the intrusive burial assemblage of the North and Southeast room blocks at Galaz is nothing more than what would be expected from the vagaries of random sampling?
Example answers for different possible significance levels:		
p = 0.80	True	Extremely likely
p = 0.50	True	Very likely
p = 0.20	True	Fairly likely
p = 0.10	True	Not very likely
p = 0.06	True	Fairly unlikely
p = 0.05	False	Fairly unlikely
p = 0.01	False	Very unlikely
p = 0.001	False	Extremely unlikely

My approach includes 12 adding or cutting activities related to remembering or forgetting, and I bring the results of all these measures to bear together when I discuss the relative differences in frequencies of any and all of those activities in the pre-Classic, Classic, and Postclassic occupations of the sites. Primarily, I treat each

measure as a binary comparison. For example, either a room had evidence of remodeling, or it did not. This binary treatment was used for both comparability between sites, and because it gets more difficult to interpret or confidently interpret chi-square tests as the number of categories and thus cells increases (Drennan 2010:191). I did find it useful to qualitatively compare more than just presence-absence data for some measures at certain sites. For instance, the researchers at both Mattocks and Galaz characterized burned structures as partially burned or severely and uniformly burned, and therefore I could further compare the severity of burning between room blocks and across time when burning was present. Secondary non-binary examinations of the data included intrusive burial phase gaps, intrusive burial depths, intrusive burial ages, intrusive burial context, type of superpositioning, architectural phase gaps, numbers of floors, and types of trash and filled structures. When possible, these measures too were lumped. An example of this would be lumping cleaning prior to abandonment and removing of construction materials to bring the expected values up to more acceptable levels.

Summary of My Methodological Approach

The methods discussed in this chapter are drawn from ethnographic and archaeological sources that are appropriate analogs with either culture history affiliation, such as the Southwest groups, or are on similar trajectories, such as the Çatalhöyük site in Turkey. Indeed, many comparisons have been made between the archaeological and historical groups dwelling in these Southwest and Turkey regions.

The measures outlined above are most likely to capture memory making, or forgetting, or both, through the manner and frequency in which lineage or corporate groups used the material remains of their past. Both the temporality of the memory-making events and the earlier temporality that these events reference, are integral to record. Memory events that invoke or reference the earliest times or ceremonial events may carry greater weight and visibility. Thus, documenting the time and context surrounding these adding and cutting events can help elucidate different intimacies, knowledge, and access to the past for certain supra-household groups at sites, at certain time periods. This intimacy, knowledge, and access may have translated into social, ritual, or economic power and prestige. All of these facets are part of the process of remembering and forgetting. Both the sites and variables chosen, provide the best chance to examine Mimbres social memory within context continuity and discontinuity.

The measures taken together as a whole have the freedom to capture multi-vocality in how different groups inscribed and performed memory through the strengthening, inventing, exaggerating, or reclaiming of their histories using the material landscape. My approach to statistical significance testing likewise is qualitative to allow for multiple narratives of past memory practices to be formed, by lumping and examining frequencies of multiple lines of evidence. Only by condensing these total practices into remembering, forgetting, or for room blocks and sites throughout time can we start to understand how memory is operationalized and played out across the built and inhabited landscape and across temporalities.

Ethnographic concepts of place-making, antecedence, and parody are integral interpretative tools for explaining variations and changes in frequency of social memory practices within the politics of this process such as displaying, dominating, destroying, obscuring, inventing, and reclaiming, and they will be discussed at length in Chapter 7.

CHAPTER 5
EVIDENCE FOR SOCIAL MEMORY IN MIMBRES BURIALS

As the last two chapters indicate, many behaviors such as visitation and reference land on the vast continuum somewhere between selectively forgetting and actively remembering. Each of these activities leave material configurations of those complex relationships between the present and the past. Thus, given a locale occupied by previous generations, I examine the various ways inhabitants add to and build palimpsest, cut, or both, effectively hiding or rewriting over the social and physical landscape.

Although they only comprise seven to sixteen percent of the total burial assemblage for the sites used, I primarily focus on 123 intrusive burials, defined as burials with dateable pottery styles or relative stratigraphy that post-dates the first use of a structure or area prior to decommissioning or abandonment. Starting with the NAN Ranch site, followed by the Galaz and Mattocks sites, I discuss the differences in locations, dates, and characteristics of those intrusive burial events, and I compare the results between residential groups at the scale of room blocks for each site. Examination of how much time elapsed between structure abandonment and intrusive burial placement, the relative depths of intrusive burials, the ages and sexes of individuals interred, the room context in which they were interred, the presence or absence of accompanying vessels, and the frequency with which chosen intrusive burial locales were superimposed or contained other burials further helps highlight intra-site differences in memory practices.

In this chapter, I argue that the ways in which intrusive burials of people, burial removals and disturbances, and object caches are documented at all room blocks as displays of antecedence, whether belonging to a founding family or not. During the Classic period (A.D. 1000-1130), I argue that more residential corporate groups are taking part in similar performances of social memory and antecedence, but that founding groups continue to demonstrate longer ties through individuals interred at deeper levels or in much earlier or even the earliest contexts. In other words, during the Classic there is a temporal break from the previous period through an increase in the frequency of adding and cutting activities associated with social memory for all groups inhabiting a site. Lastly, I argue that the ways that social memory is performed by site inhabitants of Galaz are characteristically different from the other two sites examined. I support these arguments through the observations gleaned from the analysis and results detailed below.

Cutting and Adding Processes

Cutting and adding is a complex process with many variables to consider and ways for burials interred by different residential groups to vary. It is also a process on a continuum of different social significances and purposes. In one way, cutting is destruction and can signify erasure or forgetting of the earlier occupation. In another respect, laying something recent into much older contexts alongside other individuals and assemblages can be viewed as a means of remembering, returning, and remaking, possibly for genealogy or history making (McAnany and Hodder 2009). Thus, I examine the different ways these processes diverge in the practice of Mimbres actors at the

supra-household room block level. I discuss the site patterns at NAN Ranch first, followed by Galaz and then Mattocks. This is in the effort to distinguish differences at both the household but more importantly the locus or room block scale as indicated by my arguments outlined above.

Intrusive Burials

By nature, intrusive burials cut into older deposits in order to add additional internments. Intrusive burials are a means by which inhabitants could physically lay a recently deceased individual within or touching an earlier temporality and make reference to earlier places on the landscape. It is one method to give the present continuity with the past, highlight a group's ties to a place, and demonstrate their rights or privileges through antecedence.

First, I detail and examine how these significant and meaningful links were carried out by founding and later residential groups at each site through the spatial arrangement of intrusive burials into older contexts. Table 5.1 below illustrates the intrusive assemblage for each time period at the three sites investigated. I use the temporal data to track changes in frequencies of social memory practices through time and to also document the temporal lengths between the end of occupation of a structure and the later event of remembering and referencing. Following a description of the spatial patterns in the frequencies of burials at NAN Ranch, Galaz, and Mattocks, I analyze aspects concerning the contexts of the intrusive assemblage to explore differences in the intrusive assemblages the manner in which they are performed among room blocks at each site. In order, the variables are the time spread from the

structure abandonment to the date of the intrusive burial, the relative stratigraphic depths of the burials, the ages and sexes of interred individuals, the contexts of rooms containing intrusive burials, the presence or absence of accompanying ceramic vessels, the frequency of burials that occurred in superimposed contexts, and the frequency they occurred in rooms with non-intrusive burials.

Table 5.1. Galaz, Mattocks and NAN Ranch Intrusive Burials by Burial Event Date. Late Pithouse/Classic burials are listed in transitional even though only NAN Ranch has a specified Transitional architectural phase.

Site	**Three Circle**	**Transitional (LLP/Classic)**	**Classic**	**Postclassic**	**Total**
Galaz	1	2	55	11	69
Mattocks	0	3	23	0	26
NAN Ranch	0	8	20	0	28
Total	1	13	98	11	123

NAN Ranch. There are 28 Transitional or Classic intrusive or probably intrusive burials located in the NAN Ranch room blocks (Figure 5.1). The earliest contexts in which inhabitants interred individuals date to the San Francisco phase (A.D. 750-850). The earliest intrusive burials of the East room block date to the Transitional period between the Three Circle phase and Classic period. Most were interred during the Classic period (Table 5.2). As Table 5.3 illustrates, most Classic intrusive burials were placed in slightly earlier Classic pueblo rooms. The East room block contains the most with a total of 18 burials, followed next by the Southeast room block which contains five burials and one more than the South room block despite the fewer number of rooms in the Southeast room block.

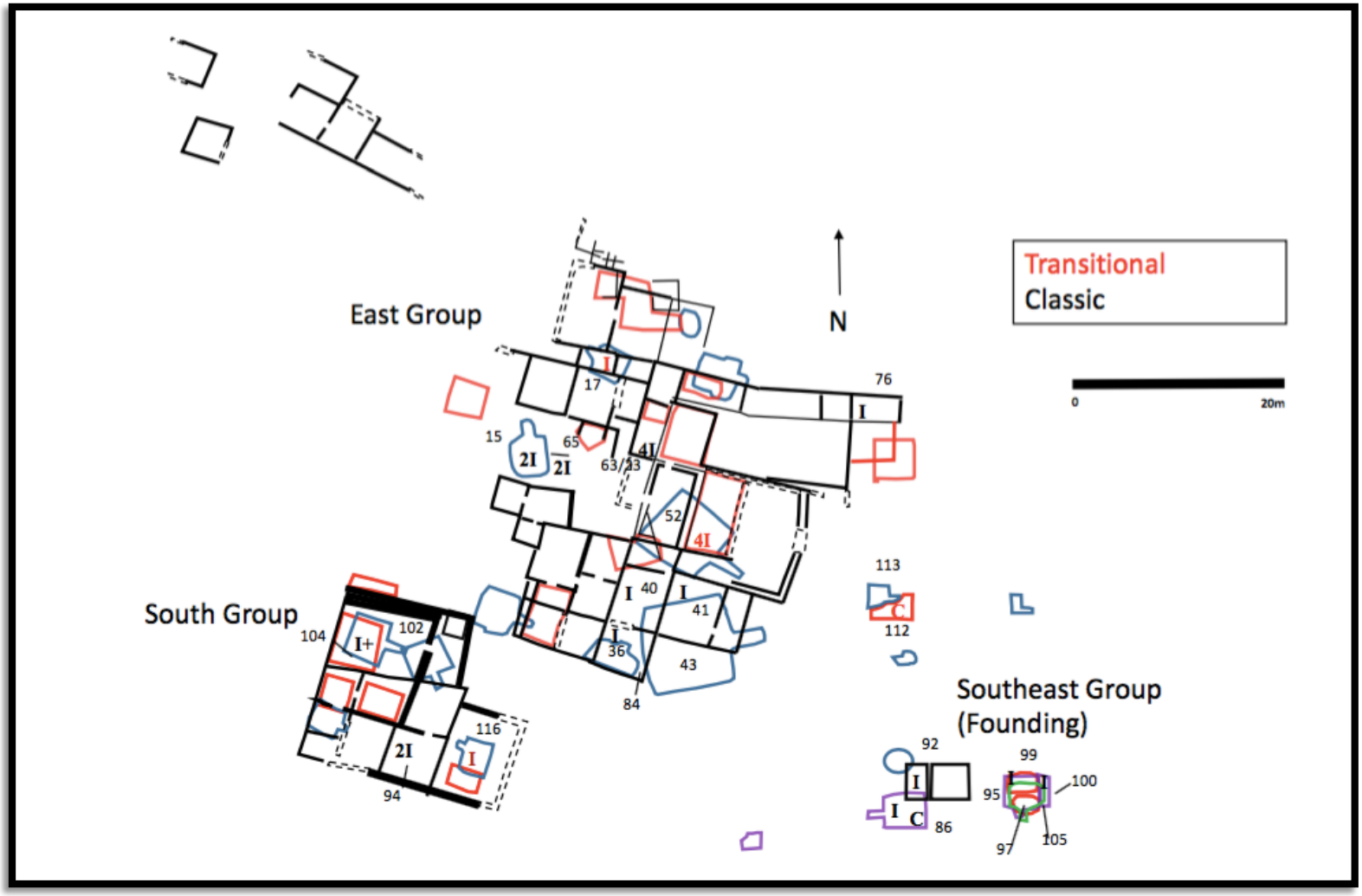

Figure 5.1. Map of intrusive inhumation (I) and cremation (C) burials, that date to the Transitional and Classic periods at NAN Ranch.

Table 5.2. Frequencies of Intrusive Burials at NAN Ranch Room Blocks by Burial Date.

Room Block	Transitional	Classic	Total
East	7	12	19
South	2	2	4
Southeast	0	5	5
Total	9	19	28

Table 5.3. Frequencies of NAN Ranch Intrusive Burials in Earlier Contexts.

Burial Date	Georgetown Structure	San Francisco Structure	Three Circle Structure	Transitional Structure	Classic Structure	Total
Transitional	0	0	7	0	0	7
Transitional/ Classic	0	0	1	0	0	1
Classic	0	3	5	1	11	20
Total	0	1	14	1	11	28

Galaz. I examined, a total of 69 burials in three Galaz site room blocks. All but six of the entire intrusive burial assemblage are located within the confines of the North room block (Figure 5.2), with one burial in Pithouse 20 just to the west of the room block. The burial in Pithouse 20 is most likely the earliest intrusive burial both at Galaz and all the sites in this study. As Table 5.4 Illustrates, most intrusive burials were interred during the Classic period, although there are three that date somewhere in the Late Pithouse or Early Classic periods. Intrusive burials continued to be placed into earlier Classic contexts during the Postclassic occupation of the site. Structures of Three Circle (A.D. 850-1000) age are the most common structure phases hat groups chose to place later interments (Table 5.5).

Table 5.4. Frequencies of Intrusive Burials at Galaz Room Blocks by Burial Date.

Room Block	Late Pithouse/Early Classic	Classic	Postclassic	Totals
North	1	51	11	63
Southeast	1	4	0	5
Southwest	1	0	0	1
Totals	3	55	11	69

Table 5.5. Frequencies of Galaz Intrusive Burials in Certain Earlier Contexts.

Burial Date	Georgetown Structure	San Francisco Structure	Three Circle Structure	Classic Structure	Total
Late Pithouse/Classic	1	1	1	0	3
Classic	0	0	51	4	55
Postclassic	0	0	3	8	11
Total	1	1	55	12	69

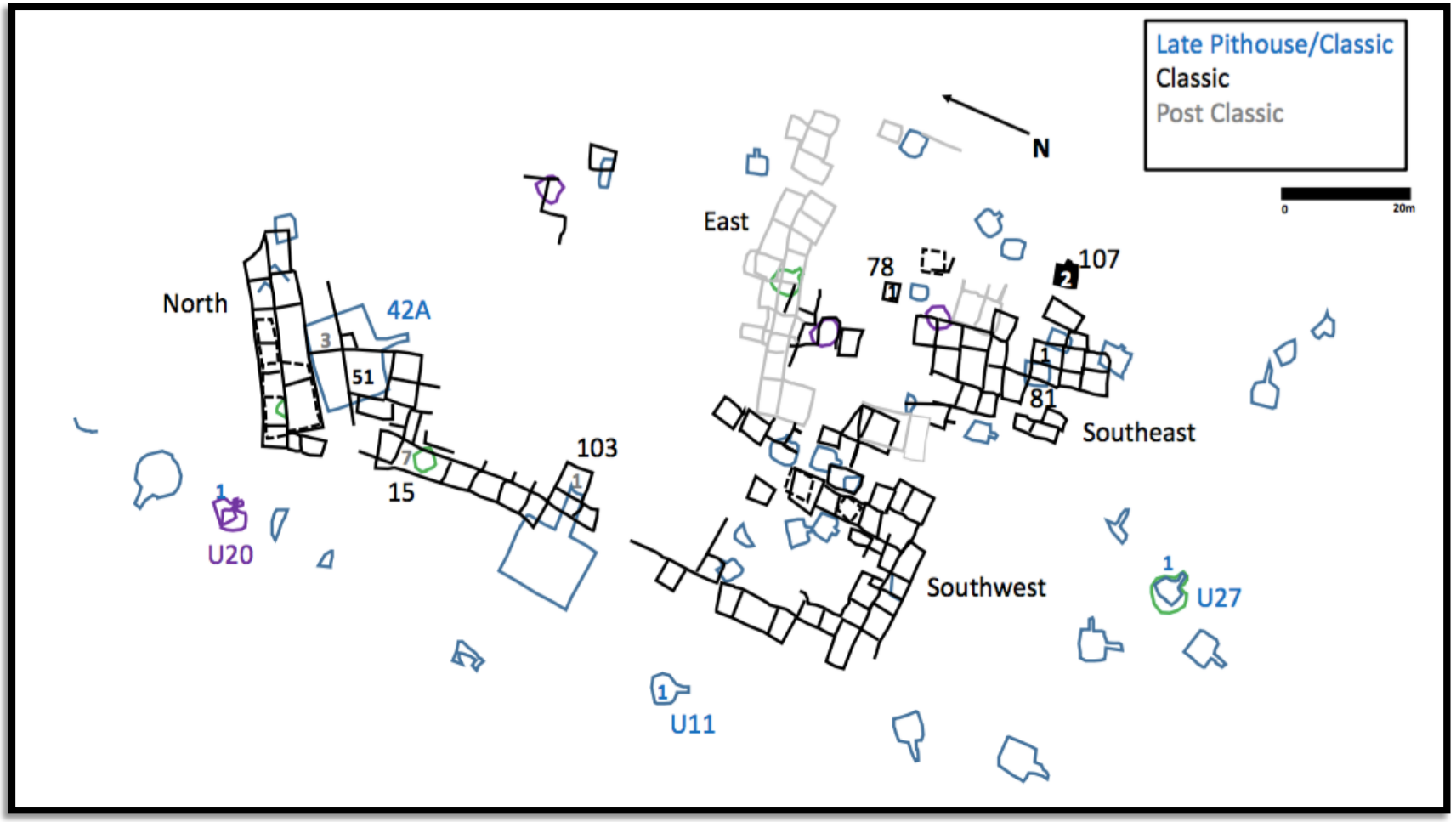

Figure 5.2. Map of Late Pithouse, Classic and Postclassic intrusive inhumation locations at Galaz. Georgetown phase structures (A.D. 550-650) are marked in green, San Francisco (A.D. 650-750) in purple, Three Circle (A.D. 750-1000) in blue, Classic (A.D. 1000-1130) in black, and Postclassic (A.D. 1130-1350) in gray.

Mattocks. I identified 26 burials from all excavated room blocks at the Mattocks site (Figure 5.3). Seven are in the earliest and only Georgetown phase structure at this relatively late site (Table 5.6, Table 5.7). Site inhabitants also placed six intrusive burials in the 100s, three in the 200s, one in the 300s, and nine in the 400s room block. The 300s most likely had more burials, but the recorded burials were not associated with specific rooms (Nesbitt 1931) so they cannot be used for this present study. As Table 5. 6 shows, all but three burials date to the Classic period, and the remaining burials could not be restricted to just once period and are listed as Late Pithouse or Early Classic.

Table 5.6. Frequencies of Intrusive Burials at Mattocks Room Blocks by Burial Date.

Room Block	Late Pithouse/Early Classic	Classic	Totals
100s	0	6	6
200s	3	0	3
300s	0	1	1
400s	0	9	9
Southeast	0	7	7
Totals	3	23	26

Table 5.7. Frequencies of Mattocks Intrusive Burials in Earlier Contexts.

Burial Date	Georgetown Structure	San Francisco Structure	Three Circle Structure	Classic Structure	Total
Late Pithouse/ Classic	0	0	3	0	3
Classic	7	0	3	13	23
Total	7	0	6	13	26

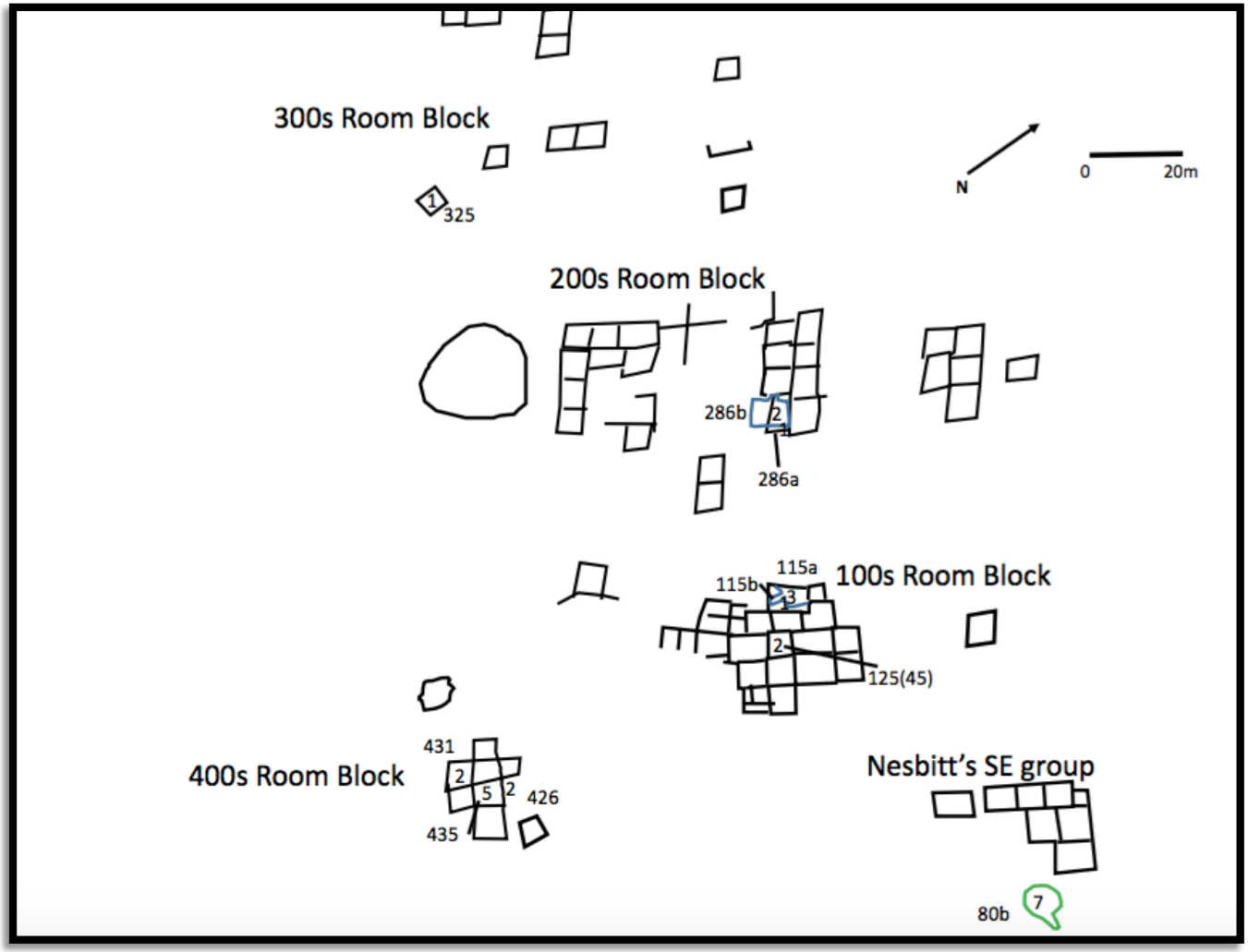

Figure 5.3. Map of Late Pithouse/Classic and Classic intrusive burials at Mattocks. Georgetown phase structures (A.D. 550-650) are marked in green, Three Circle (A.D. 750-1000) in blue, and Classic (A.D. 1000-1130) in black.

Time Spans Between Structure Dates and Date of Burial Intrusions

One of the key defining questions that helps distinguish different performances and lengths of occupational continuity for groups at NAN Ranch, Galaz, and Mattocks is how long the gap was between the occupation of a room or pithouse and the date of the intrusive intramural burial event. Here, I assume that the length of time into the past one can access, demonstrate a real or exaggerated connection to, can be an important aspect of social memory performance for the sake of antecedence and concomitant social, economic, and religious advantages. Thus, the physical and metaphorical depths (one's own history) that are attained in placing intrusive burials into contexts of varying ages is one avenue with which to further explore the intra-site narratives being written by familial residential groups.

NAN Ranch. When lumped together and without differentiating the date of the burial event to increase sample size, there are no statistically significant differences between room blocks with regards to differences in lengths of time elapsed after occupation and before intrusive burial events (Table 5.8) at the site level (χ=13.763, p=0.130). This outcome occurs even though the Eastern room block contains the majority if not all of the pre-Classic period intrusive burials.

Table. 5.8. Lengths of Time Passages between Structure Date and Intrusive Burial Date for the NAN Ranch Room Blocks. Time is measured in architectural phases. The 1+ in the South room block refers to Rooms 102/104 where burials are intrusive into 102 but the exact number is not known.

Room Block	0 Phase Gap	1 Phase Gap	1-2 Phase Gape	2 Phase Gap	2-3 Phase Gap	3 Phase Gap	Totals
East	9	6		4			19
South	2	1+	1				4
Southeast	1	1		1	1	1	5
Totals	12	8+	1	5	1	1	28+

.

The cutting (excavation) and adding (deposition) processes of intrusively burying individuals in earlier contexts for the East room block at NAN Ranch take place in the Transitional and Classic periods, thus the range between the date of occupation and the burial event is fairly short. The majority (n=6) of the Transitional intrusive burials are located in the East room block as Table 5.8 and Figure 5.4 illustrate below. This includes those in the Eastern midden directly east of room block. The other reason is the overall greater frequency of intrusive burials (n=19), which is to be expected given the size and number of rooms of the room block.

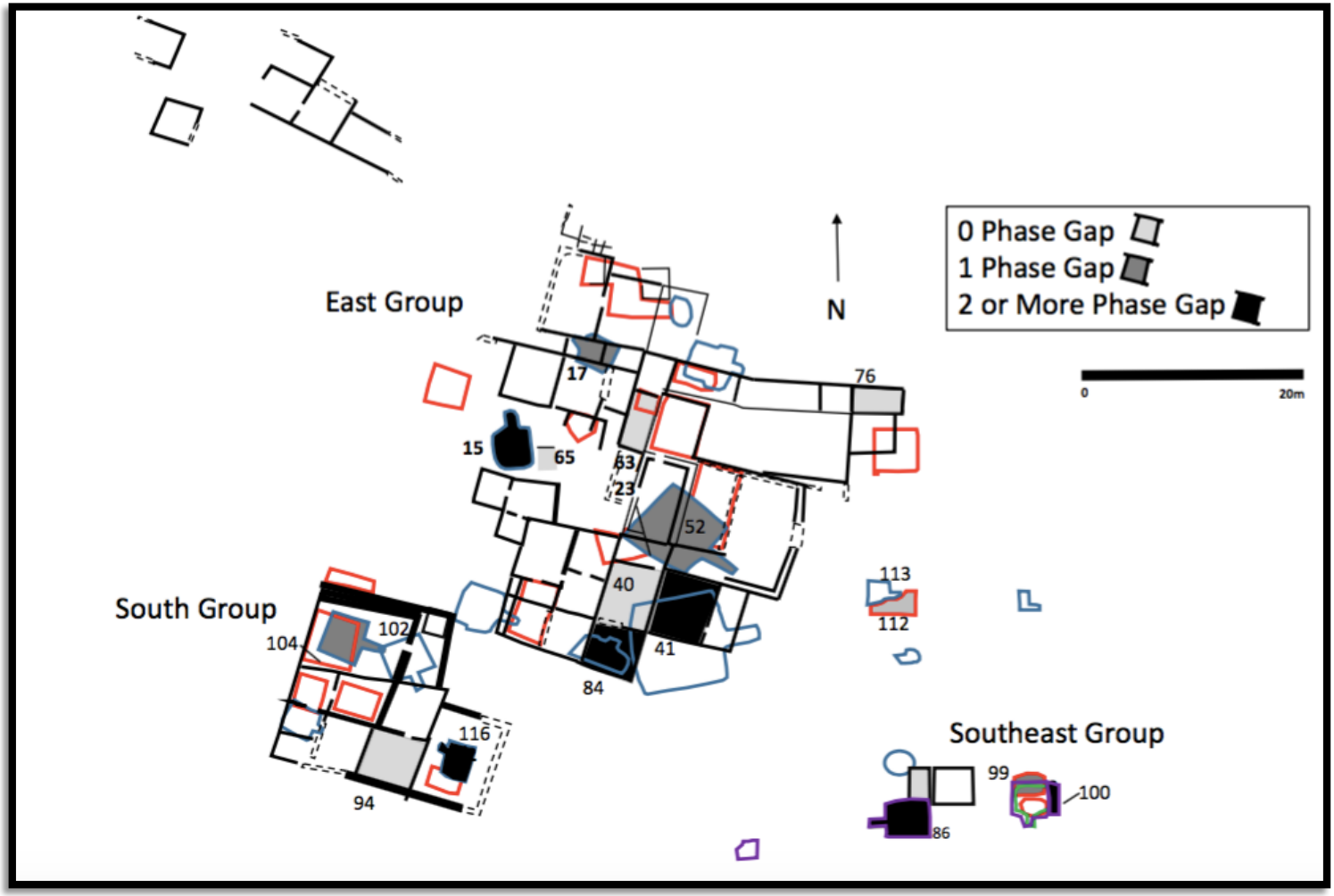

Figure 5.4. Map of NAN Ranch rooms with intrusive burials and the time span between the room date and the burial date (0-3 architectural phases). Georgetown phase structures (A.D. 550-650) are marked in green, San Francisco (A.D. 650-750) in purple, Three Circle (A.D. 750-1000) in blue, Transitional (A.D. 900-1000) in red, and Classic (A.D. 1000-1130) in black.

The South residential group's range between the date of occupation of the intruded room and the date of the intrusive burial is relatively short, varying from 0-2 architectural phases at the latest. Burial 226 in Three Circle Pithouse 116 contains no vessels and thus is not confidently dated to either the Transitional or Classic period. The top of the pit could not be located, and so the surface from which it was interred is also unknown (Shafer 1996:33). If it is a Transitional burial, that would make the span between the two events to be just one archaeological phase, and if it is Classic, that is a two phase difference. Thus, as a whole, the South room block has the least frequency of intrusive burials with little time passing between the end of occupation and the later intrusive burial event relative to the other room blocks at NAN Ranch. Lengths of time passages between structure date and intrusive burial date for the NAN Ranch room blocks. Time is measured in architectural phases. The 1+ in the South room block refers to Rooms 102/104 where burials are intrusive into 102 but the exact number is not known.

The Southeast room block, on the other hand, while only containing five recorded intrusive burials for roughly 10 pithouses or rooms, has more intrusive burials per room than those present at the East room block. As shown in the next chapter, this Southeast group spans the entire sequence of occupation from the Georgetown through the Classic period. As this is the case, it is not surprising that it is the only locale at NAN Ranch to contain intrusive burials that were interred long after occupation (as many as three chronological phases). Again, this is a qualitative and not statistically significant difference between room blocks.

All of the intrusive burials, including the cremation (Burial 175) in Pithouse 86 in the Southeast room block, were interred during the Classic period. With the exception being the 1-2 unknown gap after occupation and before burial, inhabitants placed one individual who died after A.D. 1000 into a room that was newly unoccupied (Classic Room 92), had been abandoned for maybe a generation (Transitional Room 99), and had been unused for many generations (San Francisco phase Rooms 86 and 105). These later Classic burials, made by cutting into older contexts, and placed in one structure for each preceding architectural phase create a tie and continuity to those earlier places and the people who lived there. This level of continuity performed by those living during the Classic period is unmatched at the other room blocks at the site, perhaps only partly due to the limited locales of San Francisco age structures. Just because those earlier pithouses were present does not mean that Southeastern inhabitants had to bury individuals there, or indeed in one of each type running the architectural gamut.

The Southeastern group, which contains the only Georgetown (A.D. 550-650) age structure is presumably a locale for the founding families of the NAN Ranch community (Shafer 2003), but they did not demonstrate this through intrusive burials at this locale at the supra-household level during the Late Pithouse period. It is possible they demonstrated it at the communal level by donating individuals to be interred in the Great Kiva 52 during the Transitional Period. Alternatively, as demonstrated in the next chapter, the inhabitants of the Southeast room block did enact their social memory through the additive process of architectural superposition.

Like the South room block and in contrast to the Southeast room block, the most common time spans between the intrusive event and the age of the structure are relatively short, 0-2 phases or a couple of generations for the East room block. So, while the East room block participants practiced intrusive burials more frequently during the Transitional and Classic periods, the structures within which they interred their dead were usually more recently disused than those in the Southeast room block. Thus, we can infer that while those living in the East room block practiced social memory via intrusive burials often, they did not have the depth and access to the remote past as did the founding group in the Southeastern room block.

To quickly summarize, NAN Ranch room blocks do not differ statistically from each other with regards to time elapsed after structure occupation and before intrusive burials events. Both the East and South room blocks contain intrusive burials that date no more than two architectural phases after the occupation of a structure. The Southeast room block does contain the largest architectural phase range of three for Classic burials placed in San Francisco age contexts. Thus, while not statistically significant, the founding Southeast group may have had slightly better access to the distant past.

Galaz. Differences exist among the room blocks at the Galaz site with respect to the interval length between structure occupation and later burial intruding into the fill or floor (χ=44.596, p=0.001; Table 5.9). It is extremely unlikely that the differences result from the vagaries of random sampling. Post hoc pair-wise tests also resulted in significant differences between the North and Southeast room blocks (χ=67.00,

p=0.001) and the North and Southwest room blocks (χ=42.646, p=0.001), and slightly significant differences in times after occupation and intrusive burial date between the Southeast and Southwest room blocks (χ=6.000, p=0.014). Most likely these differences are attributable to difference in one phase for all of the intrusive burials in the North room block. Following behind the North room block, the intrusive burials in the Southwest occur with the max of one architectural phase difference. Lastly, all of the intrusive burials in the Southeast room block occur in the Classic and are located in earlier Classic rooms with no phase differences between occupation and burial events.

Table 5.9. Lengths of Time Passages between Structure Date and Intrusive Burial Date for the Galaz Room Blocks. Time is measured in architectural phases. Pithouse 20 is counted in the North room block, and Pithouses 11 and 27 are counted in the Southwest and Southeast room blocks respectively.

Room Block	0 Phase Gap	0-1 Phase Gap	1 Phase Gap	Totals
North	0	1	62	63
Southeast	4	0	0	4
Southwest	0	2	0	2
Totals	4	3	62	69

At Galaz, 51 of the burials in Great Kiva 42A are from the Classic period, and the three in Room 84 and seven in Room 15 are Postclassic (Figure 5.5). Therefore, all intrusive burials in the North room block proper date to one architectural period later than the surrounding context. The only exception is Pithouse 20 which lacks diagnostic pottery and could be any time after the San Francisco phase use of the structure.

There is a clear and robust pattern that the North room block contains not only the most burials, but the most intrusive burials with slighter longer periods between the end of room occupation and the burial date (Table 5.9). Many intrusive burials at

the other room blocks date to the same phase as the room. Although the individual in superimposed Pithouse 20 was not buried with diagnostic ceramics, he or she could have been interred as late as the Classic period and could bridge the longest temporal span.

In sum, there are significant differences between the Galaz room block with regards to the timings of burial events after occupation. All of the burials in the Southeast and Southwest room blocks date to either the Classic or Late Pithouse/Classic periods and are interred in those same aged contexts with little elapsed time between. Even though most of the intrusive burials interred by inhabitants of the North room block date to the Classic or Postclassic period, they are in structures at least one architectural phase older suggesting intergenerational differences between the burials and their contexts.

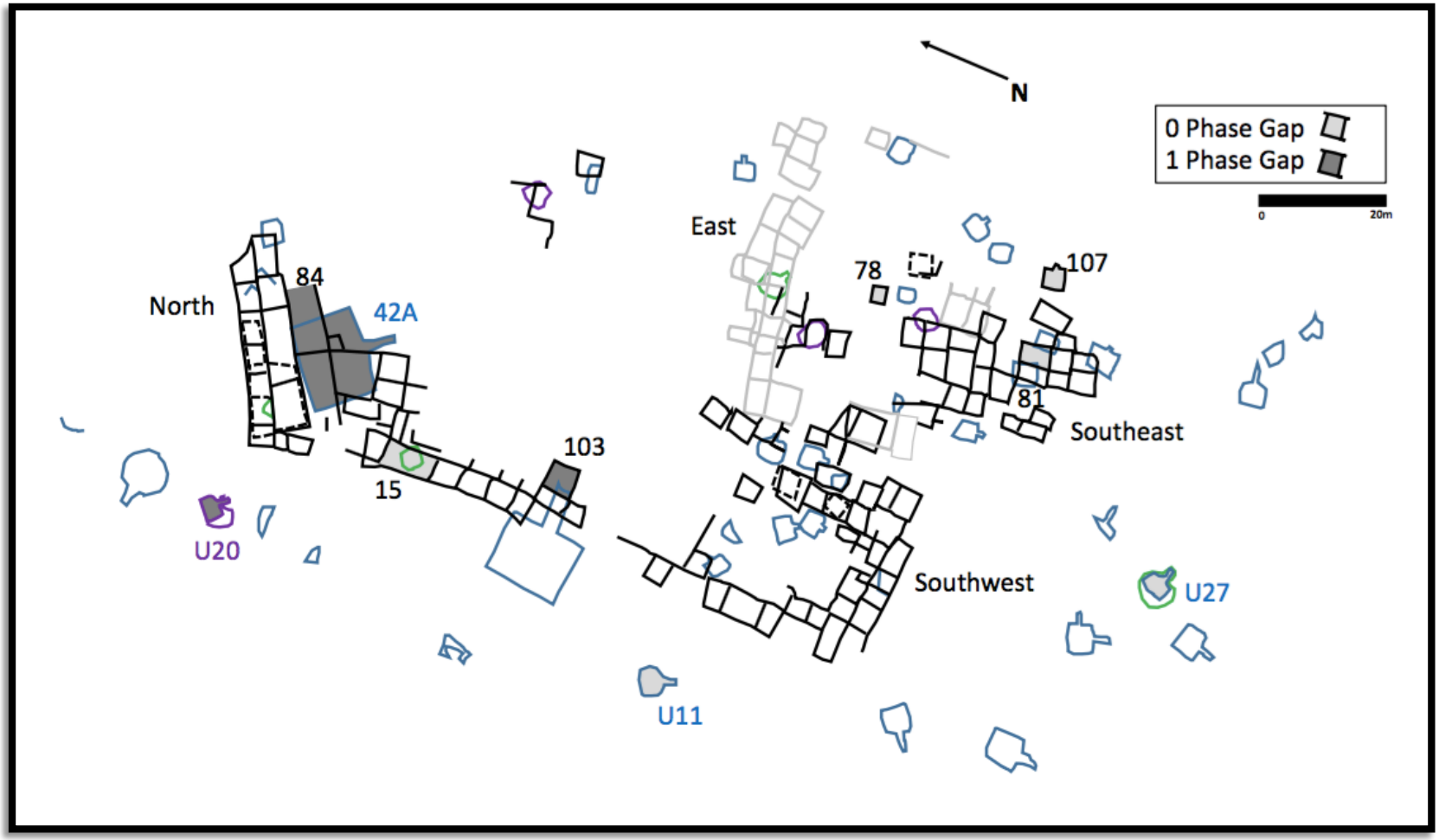

Figure 5.5. Map of Galaz rooms with intrusive burials and the time span between the room date and the burial date (0-2 architectural phases). Georgetown phase structures (A.D. 550-650) are marked in green, San Francisco (A.D. 650-750) in purple, Three Circle (A.D. 750-1000) in blue, and Classic (A.D. 1000-1130) in black, and Postclassic (A.D. 1130-1350) in gray.

Mattocks. There do appear to be statistically significant (χ=34.161, p=0.001) differences in architectural phases gaps between room blocks for all dated Mattocks site intrusive burials based on the data in Table 5.10. Although the chi-square is suspect because 20% of the cells in the contingency tables have counts less than five, the level of the p-value suggests that more than likely this does not result from chance alone and may be a pattern based on differences in behaviors relating to intrusive burials and the age of those structures. Pair-wise comparison also result in significant differences between the 100s and 400s (χ=5.625, p=0.018), 100s and Southeast room blocks (χ=13.00, p=0.002), the 200s and 400s room blocks (χ=3.273, p=0.071), 200s and Southeast room blocks (χ=10.000, p=0.007), and the 400s and Southeast room blocks (χ=16.000, p=0.001). No statistically significant differences occurred between the 100s and 200s room blocks (χ=0.225, p=0.635). The 300s room block was not compared pair-wise as it represents only a single room. The Classic burials in the Georgetown phase pithouse, a gap of three architectural phases, most likely contributed to the differences between the Southeast and the 100s, 200s, and 400s room blocks. Those intrusive burials in the 100s room block represent the second longest span of time, as opposed to those in the 400s room block which were interred during the same architectural phase as the surrounding contexts.

Table 5.10. Lengths of Time Passages between Structure Date and Intrusive Burial Date for the Mattocks Room Blocks. Time is measured in architectural phases.

Room Block	O Phase Gap	0-1 Phase Gap	1 Phase Gap	3 Phase Gap	Totals
100s	3	0	3	0	6
200s	0	3	0	0	3
300s	1	0	0	0	1
400s	9	0	0	0	9
Southeast	0	0	0	7	7
Totals	13	3	3	7	26

The Southeast room block contains burials in the oldest and only Georgetown phase structure presently known at the site (Figure 5.6). This makes the gap between the Classic period and date of the burial to the date of the structure equal to three (Table 5.10). No other room block comes close to this temporal spread. The 100s room block does contain Classic burials in Three Circle contexts, which is at most a difference of a couple of generations given the late construction dates of many of the Three Circle phase rooms. All of the 400s and 300s room block intrusive burials date to the Classic and were interred into earlier Classic rooms. In this instance, the founding group in the Southeastern room block demonstrated a longer memory through their placement of intrusive burials.

To review, there are statistically significant differences in architectural phases gaps between room blocks for all dated Mattocks site intrusive burials. Most of this variation occurred between the Southwest and other room blocks. The Classic burials in the Georgetown phase pithouse, a gap of three architectural phases, most likely

contributed to the differences between the Southeast and the 100s, 200s, and 400s room blocks.

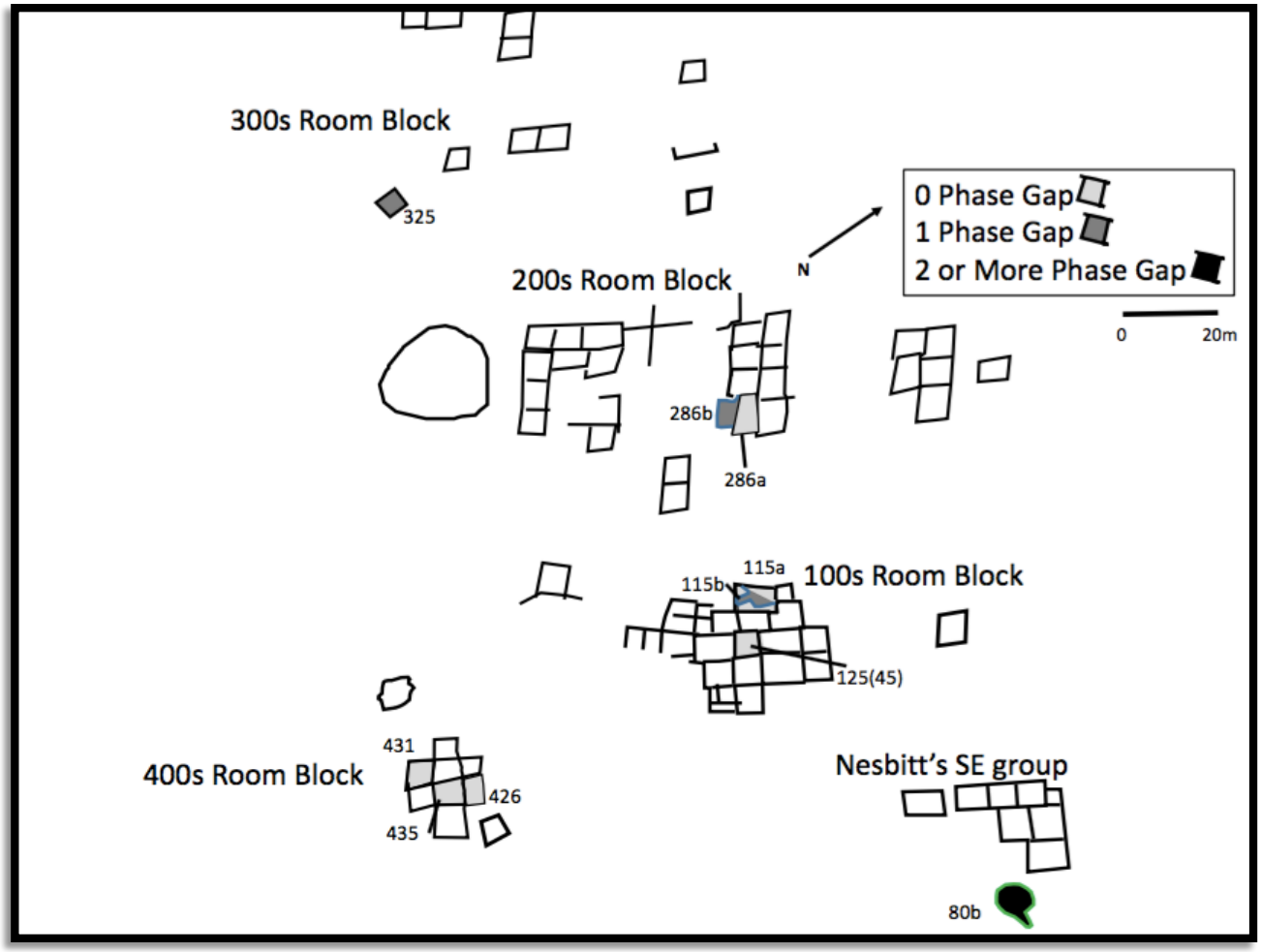

Figure 5.6. Map of Mattocks rooms with intrusive burials and the time span between the room date and the burial date (0-3 architectural phases). Georgetown phase structures (A.D. 550-650) are marked in green, Three Circle (A.D. 750-1000) in blue, and Classic (A.D. 1000-1130) in black.

Mimbres groups may have demonstrated their memory and social antecedence differences in a least two similar ways concerning depth. The first revolves around the efficacy of temporal depth through the first or the oldest; i.e., placing intrusive burials in the oldest or first type of architectural form at the site, and these burials are discussed in the above section concerning the time gap date of the structure and date of the burial. The second involves stratigraphic or vertical depth and its representation of relative historical depth. Some burials are not just in fill or roofall but are in clear association with previous floor(s), or sometimes below floors at more extreme depths, and they may hold greater significance due to their more direct associations with previous living floors, activities, and former inhabitants. As Roth and Baustian (2015:262) have noted at the Harris site, the floor, especially the floor of older households, was important, and some burial placements clearly illustrate this.

For the most part, I took previous researchers' word concerning their depth designations, and most are based on stratigraphic levels, although some such as NAN Ranch and Galaz are based on quantitative measured depth. Un-plastered burials at the floor level are also included in the intrusive assemblage as uncovered pits would affect activities performed within the structures (Gilman and LeBlanc 2017:217). There are perhaps more that are not listed here, but different recording practices, whether in unit of measurement or in relationship to ground or floor surface, obfuscates the actual number of these burials within sites. Thus, I stick to relative depths in fill or floor levels as evidenced in Table 5.11.

Table 5.11. Frequencies of Intrusive Burials at Different Depths by Room Block at NAN Ranch. (Below floor is below the floor of the lowest superimposed structure, although many are interred below the floor of a structure contemporary to the time of the interment. Excluded burial from Room 102 with no data.)

Room Block	In Fill	Near/On Floor	Below Floor	Indeterminate	Totals
East	10	1	8	0	19
South	0	2	1	1	4
Southeast	4	0	1	0	5
Totals	14	3	10	1	28

NAN Ranch. Within the NAN Ranch site, there are observable differences between room blocks, notably whether individuals were interred within rooffall and fill or below an underlying floor (Figure 5.7). By mirroring the sub-floor location of the majority of intramural inhumations, these intrusive burials might be mirroring or signaling an association with that earlier temporality and group who lived in the structure. These differences in depth do occur at the site level (Table 5.11) and are statistically significant (χ=12.330, p=0.015). Subsequent pair-wise chi-square tests resulted in significant differences between the East and the South room block (χ=8.791, p=0.012), but not between the East and the Southeast room blocks (χ=1.287, p=0.525), nor the South and Southeast room blocks (χ=5.867, p=0.053).

In sum, most intrusive burials are in the fill or near the floor, although those in the South are more often near or below the floor than those intrusive burials in the East room block. Each room block contains at least one burial below the floor. The mere presence of a later burial existing in the oldest structure may carry more weight

than being deeper, and might account for the shallowness of many of the intrusive burials.

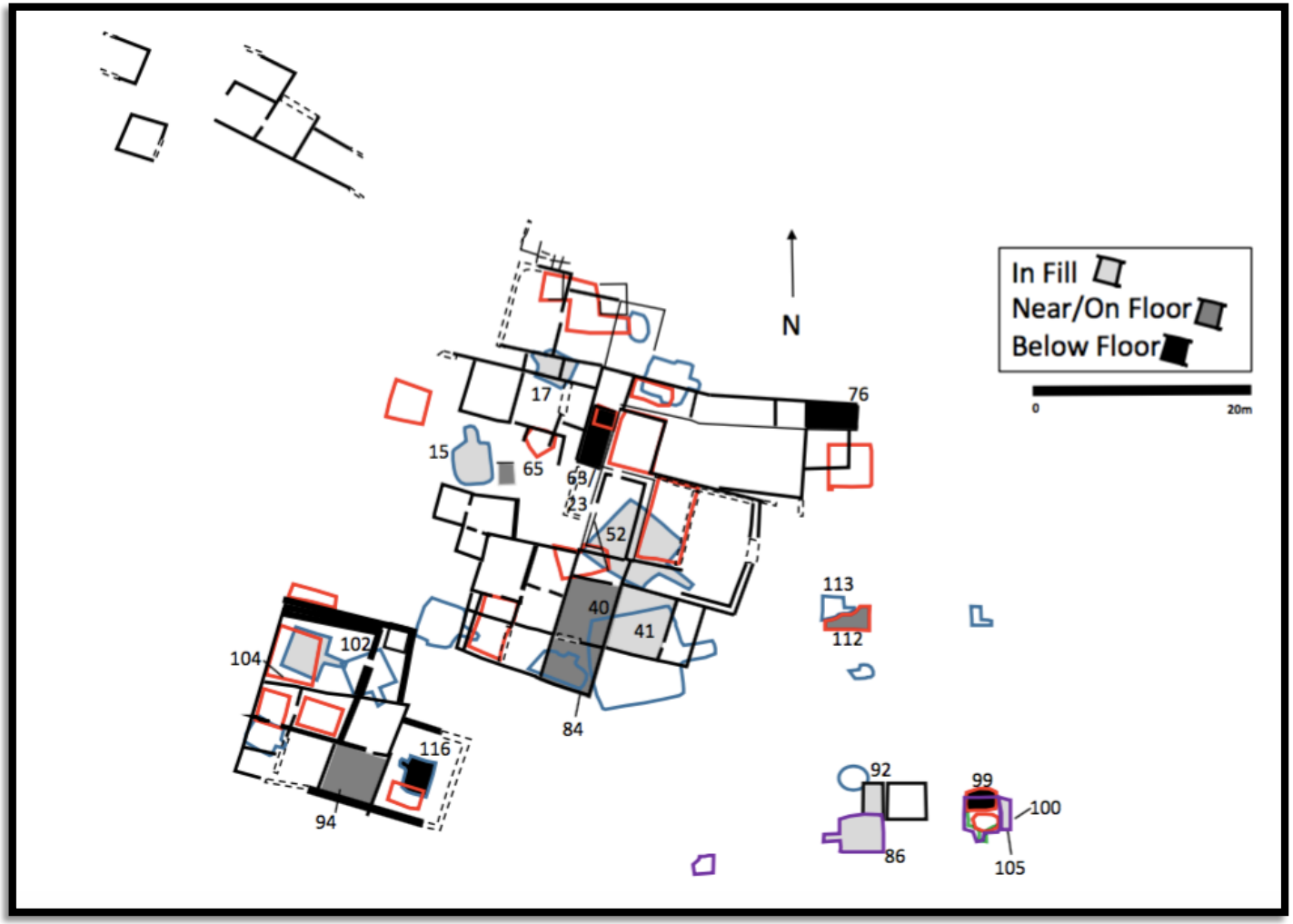

Figure 5.7. Map of various depths of intrusive burials at NAN Ranch. Georgetown phase structures (A.D. 550-650) are marked in green, San Francisco (A.D. 650-750) in purple, Three Circle (A.D. 750-1000) in blue, Transitional (A.D. 900-1000) in red, and Classic (A.D. 1000-1130) in black.

Galaz. Based on the data in Table 5.12, there are no statistically significant differences in intrusive burial relative depths occur between the residential room blocks at Galaz (χ=16.993, p=0.089). In other words, and intra-site differences regarding burial depth are not distinguishable from the vagaries of random sampling. For both the North and Southeast room blocks, intrusive burials occur at varying depths.

Table 5.12. Frequencies of Intrusive Burials at Different Depths by Room Block at Galaz.

Room Block	In Fill	Near/On Floor	Below Floor	Totals
North	55	7	1	63
Southeast	1	1	2	4
Southwest	2	0	0	2
Totals	58	8	3	69

There are only three instances of burials below the floors of uninhabited or abandoned rooms (Table 5.12, Figure 5.8). One is in unattached Room 78 within the Southeast room block. This below floor burial may be because both the structure and the burial date to the Classic period, and there was little room fill due to the more recent abandonment of the structure. Anyon and LeBlanc (1984:444) state that the burial pit was covered with rocks, but the top of the pit actually protruded slightly above the floor level. Another example of a relatively deep burial is the one within Pithouse 20 in the North room block and below the floor of the earlier pithouse. The last below floor intrusive burial is located in Great Kiva 42A, also in the North room block. All the other burials in that ceremonial structure were interred at various levels

within the fill and rooffall. It may be that the relative frequency of burials interred within that ceremonial and communal context outweighed the desire to inter all the burials through the fill. In other words, the performances were strong enough that placing individuals on or below the original floor was unnecessary, although it would seem that the inhabitants who buried that one individual below the floor felt compelled to do so. Perhaps one burial below the floor was enough to establish that linkage with the past.

In terms of the Postclassic burials, all occurred within the confines of the North room block and were either laying on or near the floor. Again, this association with the floor can suggest two things. One there is relative lack of fill with which to bury deceased members. As Room 15 in the North room block was occupied during the Terminal Classic and early Postclassic before the Postclassic room block oriented towards the Mimbres River was built, there was not much time for fill to cover the pueblo room floor, or people chose not to bring fill in. Secondly, and most importantly, like the individual below the floor in Great Kiva 42A, this action may signify a stronger connection to the past place and greater intimacy with the individuals and activities associated with that floor. I would note the seven burials in Room 15 and the association they may have held with the structure's floor and possibly activities conducted on its surface. Excavators did record a macaw burial within the room and have labeled it as a possible corporate kiva for the North room block (Anyon and LeBlanc 1984:139), which lends weight to the above argument.

In sum, there are no statistically significant differences between room blocks regarding differences in the relative depth of intrusive burials into the fill or floors of earlier contexts. Both the North and Southeast room block intrusive burial are reported at varying levels, while those burials in the Southwest room block only occur in the fill of older abandoned structures. The Postclassic intrusive internments in the North room block are located near the floor, perhaps because of less internal room fill caused the rooms being more recently abandoned.

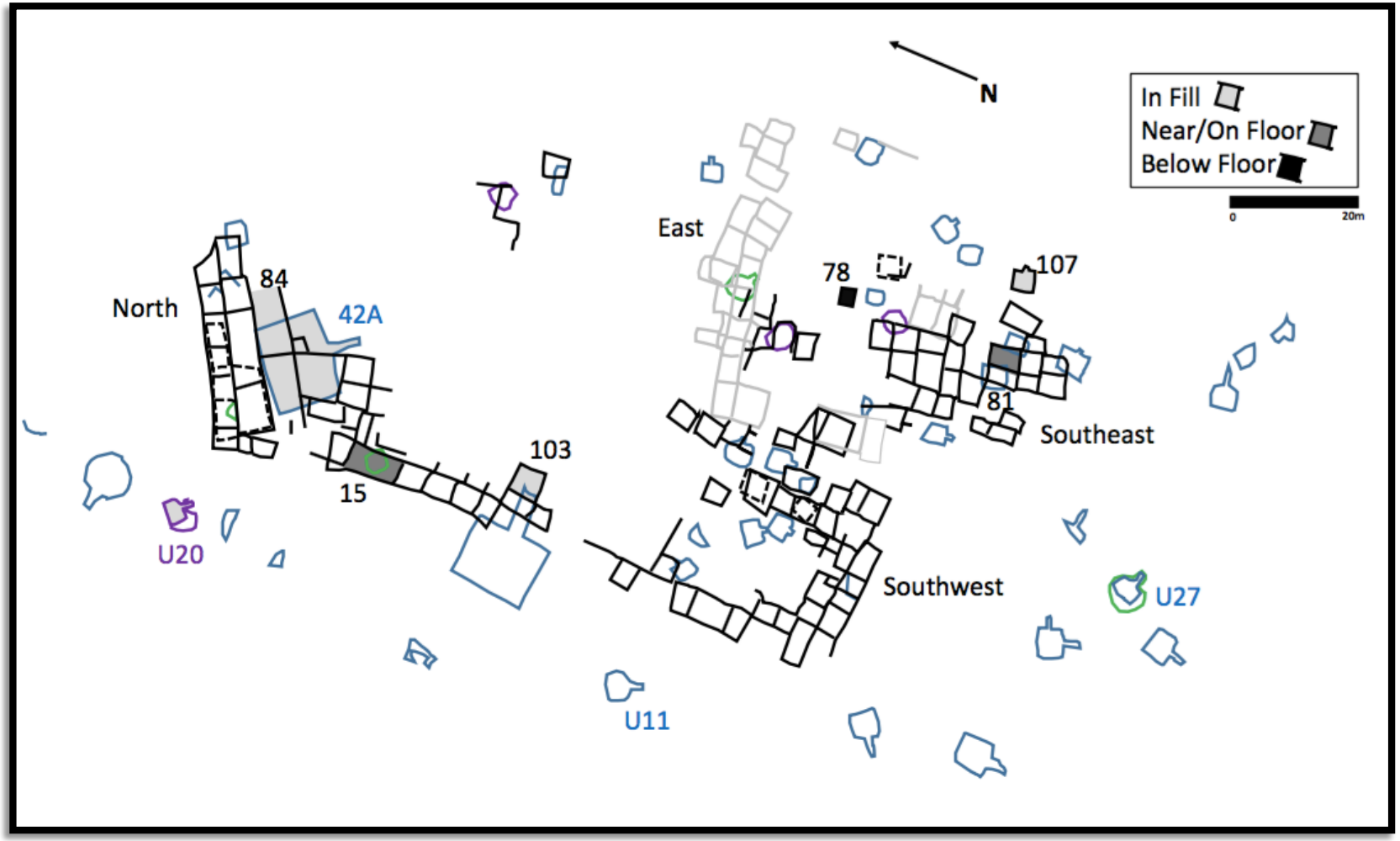

Figure 5.8. Map of various depths of intrusive burials at Galaz. Georgetown phase structures (A.D. 550-650) are marked in green, San Francisco (A.D. 650-750) in purple, Three Circle (A.D. 750-1000) in blue, and Classic (A.D. 1000-1130) in black, and Postclassic (A.D. 1130-1350) in gray.

Mattocks. When compared at the site level, the Mattocks intrusive burial assemblage does not differ significantly between room blocks based on the data present in Table 5.13 (χ=11.900, p=0.156). The 100s and Nesbitt's Southeastern group are more often associated with burials in the fill or near the floor. Three intrusive burials in Georgetown Pithouse 80b were below the original floor of the structure. The 400s, 300s, and two of the 200s intrusive burials were most often un-plastered or partially plastered burials that most likely post-date the use of the structure, and unlike some of the burials in Rooms 125, 286 and 80b, there was little fill from the floor to the ground surface as the rooms were recently abandoned (Table 5.13, Figure 5.9). Put another way, the intrusive burials in the 100s and Southeastern group are both older and deeper and might carry more social significance or produce a stronger statement of antecedence to themselves or outwardly to others. Potentially differences exist between the depths of intrusive burials in all other room blocks and those burial depths in the 400s room blocks. This non-statistically significant variation can be explained by the large number of un-plastered burials within the 400s room block, all of which date to the Classic period.

Table 5.13. Frequencies of Intrusive Burial Relative Depths between Room Blocks at Mattocks.

Room Block	In Fill	Near/On Floor	Below Floor	Totals
100s	2	2	2	6
200s	1	0	2	3
300s	0	0	1	1
400s	0	0	9	9
Southeast	4	0	3	7
Totals	7	2	17	26

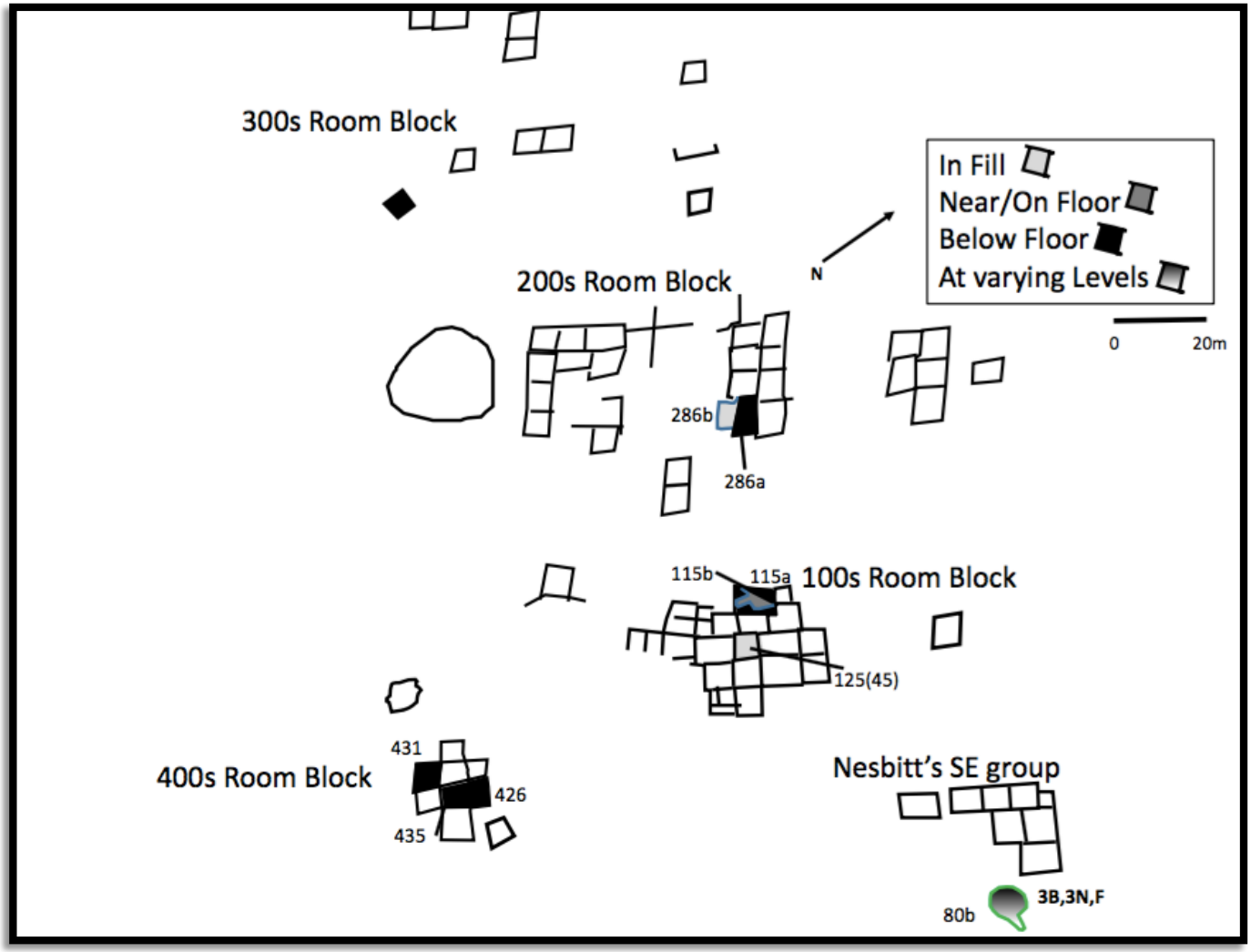

Figure 5.9. Map of various depths of intrusive burials at Mattocks. Georgetown phase structures (A.D. 550-650) are marked in green, Three Circle (A.D. 750-1000) in blue, and Classic (A.D. 1000-1130) in black.

Age of Intrusive Burials

This section details differences in age of the individuals in the intrusive assemblage between room blocks and between the Late Pithouse and Classic periods. When ages are not always known because of degradation and affects from multiple looting attempts, or consistently recorded. The presence of all age groups, including infant, child, adolescent, adult, and old adult (50 years or older), placed intrusively into earlier rooms suggests that intrusive burials are not an outcome of achieved status. More likely, the burials are related through kinship and demonstrate that affinity through the location of the intrusive burial. Children and adolescents are lumped together for this analysis due to low counts.

NAN Ranch. As Figure 5.10 And Table 5.14 illustrate, all ages from infants to old adults (over 50) are represented in the intrusive assemblage. Further, all room blocks contain at least one adult and one sub-adult. The majority (53.6%) are adults. old adults comprise three of the four intrusive burials in Great Kiva 52 as well as one of the two intrusive burials in Pithouse 15, both rooms in the East room block. No real statistical differences exist in individual ages from the Transitional to the Classic phases, as old adults, adults, and infants were buried intrusively during both of those periods.

Statistically, there are no age differences in the intrusive burials between the room blocks (Table 5.14) (χ=10.682, p=0.383). As discussed earlier, most of the Transitional burials at NAN Ranch occurred within the East room block, and the Southeast room block contains only burials intrusively placed during the Classic. Thus,

during the Transitional period three old adults, one adult, and one indeterminate burial were interred intrusively in the East room block and plaza area. Around the same time, one infant was interred in room 116 in the South room block. During the Classic, inhabitants at all three room blocks were interring deceased members of all ages intrusively, which suggests burial placement to be primarily determined by family or social affiliation rather than something else such as achieved status.

Table 5.14. Frequencies of Intrusive Burial Ages by Room Block at NAN Ranch. The two indeterminate are in Rooms 112 and 102/104. All classifications come from Shafer (2003).

Room Block	Infant	Child/Adolescent	Adult	Old Adult	Indeterminate	Totals
East	4	1	9	4	1	19
South	1	1	1	0	1	4
Southeast	0	1	4	0	0	5
Totals	4	3	15	4	2	28

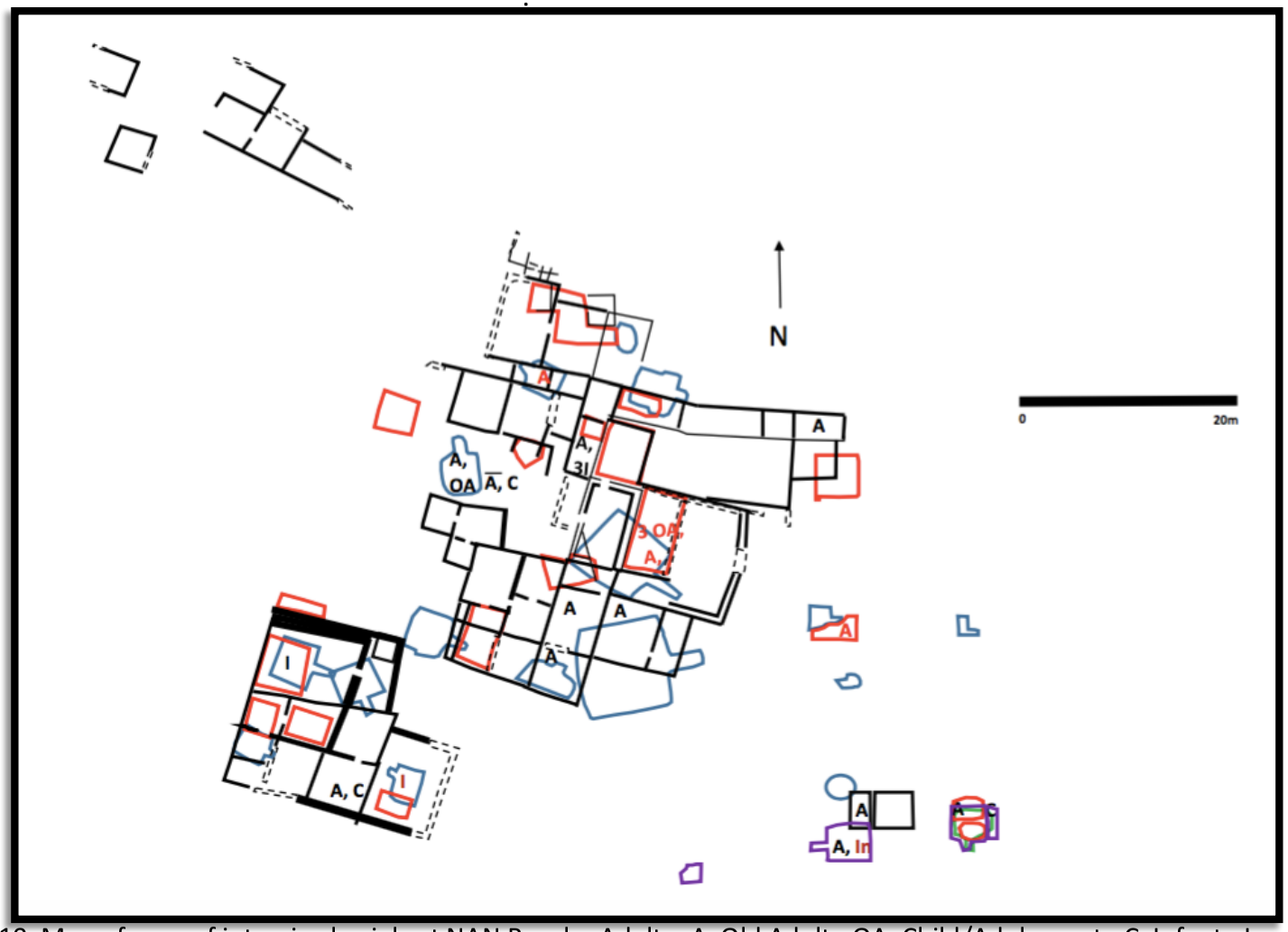

Figure 5.10. Map of ages of intrusive burials at NAN Ranch. Adult = A, Old Adult= OA, Child/Adolescent= C, Infant= I. Georgetown phase structures (A.D. 550-650) are marked in green, San Francisco (A.D. 650-750) in purple, Three Circle (A.D. 750-1000) in blue, Transitional (A.D. 900-1000) in red, and Classic (A.D. 1000-1130) in black

Galaz. Based on the data presented in Table 5.15, and excluding those that were too degraded to be identified to an age group (n=4) one of which is a cremation, I detected no statistical differences in ages of individuals interred intrusively among room blocks at Galaz (χ=12.043, p=0.149). Adults, old adults, children, and infants and thus all five age groups are represented in intrusive population of North room block (Figure 5.11). The Southeast group also has at least one child and one adult present in the assemblage. The inhabitants of the Southwest room block interred one adult and one indeterminately aged individual. Again, this suggests that achieved status was not the major factor for being buried in an earlier structure, and intrusive burials of individuals most likely served as a lineage or corporate group connection.

Table 5.15. Frequencies of Intrusive Burial Ages by Room Block at Galaz.

Room Block	**Infant**	**Child/Adolescent**	**Adult**	**Old Adult**	**Indeterminate**	**Totals**
North	8	15	30	8	2	63
Southeast	0	1	2	0	1	4
Southwest	0	0	1	0	1	2
Totals	8	16	33	8	4	69

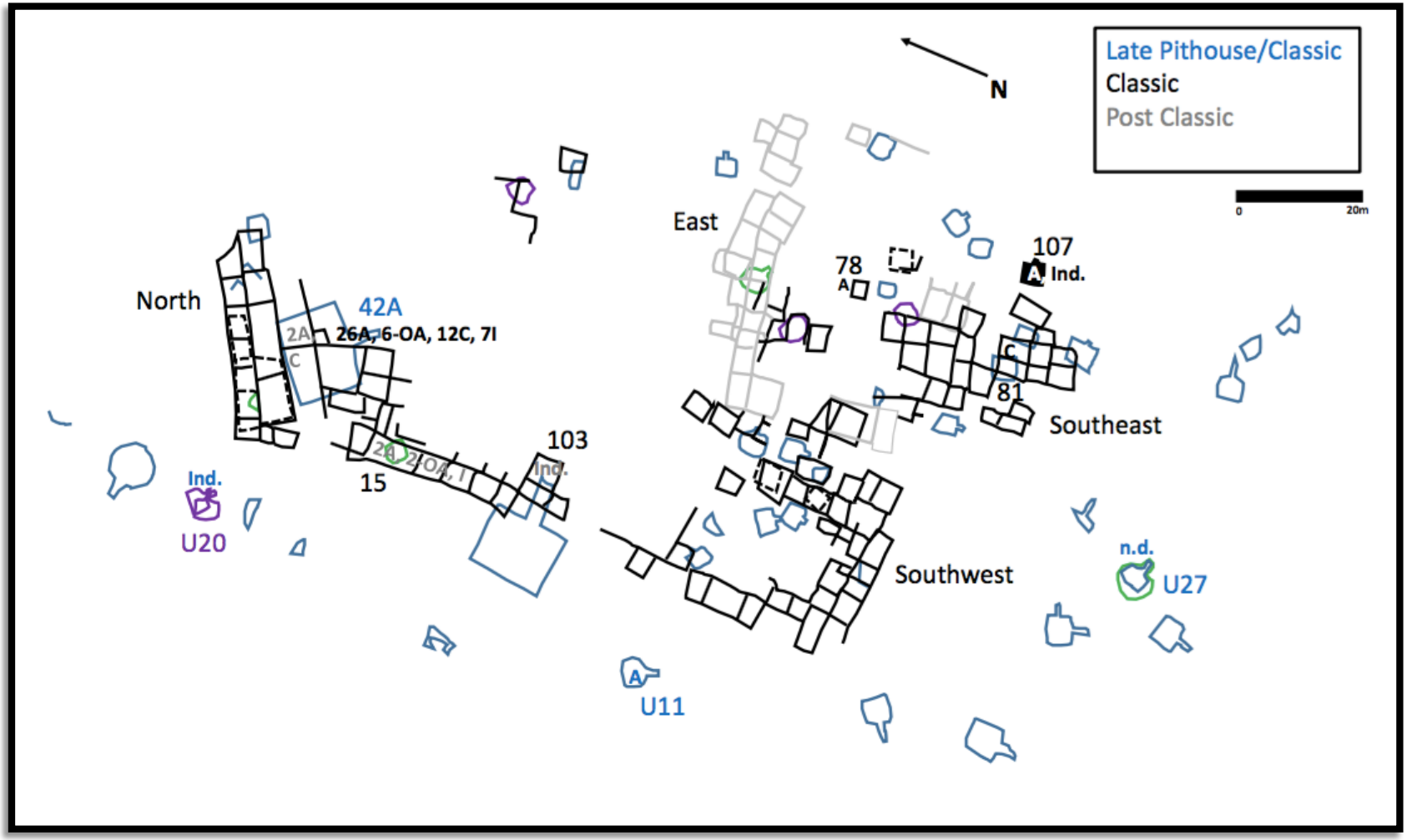

Figure 5.11. Map of ages of intrusive burials at Galaz. Adult = A, Old Adult= OA, Child/Adolescent= C, Infant= I. Georgetown phase structures (A.D. 550-650) are marked in green, San Francisco (A.D. 650-750) in purple, Three Circle (A.D. 750-1000) in blue, and Classic (A.D. 1000-1130) in black, and Postclassic (A.D. 1130-1350) in gray.

Mattocks. As Table 5.16 demonstrates, while there is variation in the ages of the people in the intrusive burials, there are no significant differences between room blocks (χ=16.271, p=0.434), although the chi-square is suspect. There are relatively few infants, but given the potted nature of the site this is not surprising. Children and adults are present in the intrusive assemblages of the 100s, 400s, and Nesbitt's Southeastern group (Figure 5.12). The 200 and 300s contain only adults or old adults. Interestingly, Old adults are placed into the possible communal storage area of Unit 286 and in the intrusive burials into the earliest Three Circle phase structure at the site Pithouse 286b. The former practice of old adults in ceremonial/communal spaces was also observed at NAN Ranch.

Table 5.16. Frequencies of Intrusive Burial Ages by Room Blocks at Mattocks.

Room Block	**Infant**	**Child/Adolescent**	**Adult**	**Old Adult**	**Indeterminate**	**Totals**
100s	0	1	3	0	2	6
200s	0	0	1	2	0	3
300s	0	0	1	0	0	1
400s	1	3	3	0	2	9
Southeast	0	1	4	1	1	7
Totals	1	5	12	3	5	26

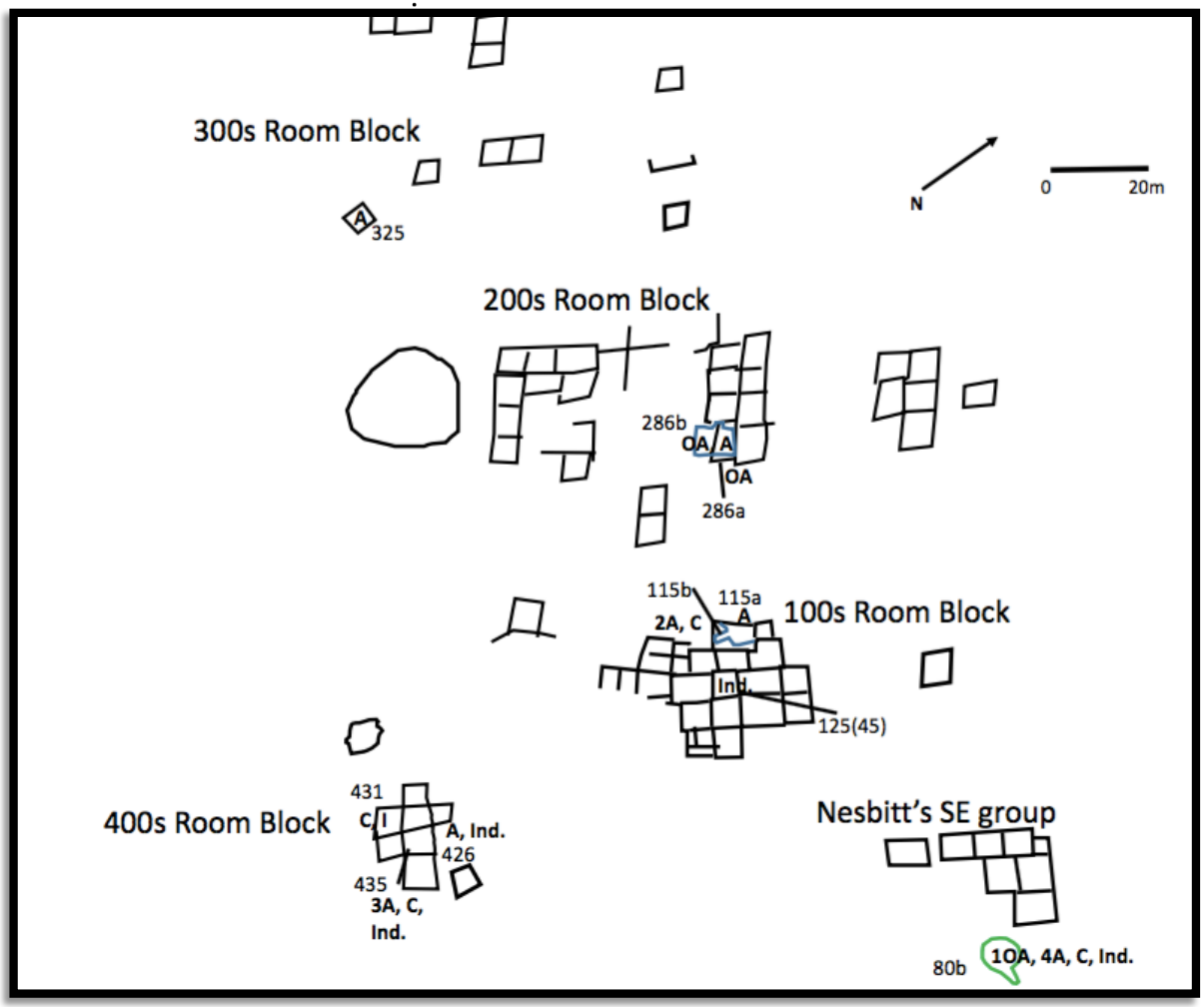

Figure 5.12. Map of ages of intrusive burials at Mattocks. Adult = A, Old Adult= OA, Child/Adolescent= C, Infant= I. Georgetown phase structures (A.D. 550-650) are marked in green, Three Circle (A.D. 750-1000) in blue, and Classic (A.D. 1000-1130) in black

Sexes of intrusive burials

Once again, like ages, this pattern, or in many of these cases, lack of pattern, reinforces the notion that deceased members chosen to be interred into earlier contexts by their living counterparts probably has more to do with lineage affiliation than public or private gender domains. The public or private domain for certain sexes argument is a vastly oversimplified dichotomy. However, a relative presence or absence analysis proves fruitful for identifying differences in how residential corporate groups may perform and re-perform their own histories through intrusive burials.

NAN Ranch. While one adult and one old adult burial are present in Great Kiva 52 are designated as male, women are also represented, namely one old adult female who was also present in the fill. Both males and females are present in each room blocks except for the SE room block (Figure 5.13, Table 5.17). There are no statistically significant differences in burial sexes between room blocks excluding indeterminate sexed individuals (χ=7.200, p=0.126; Table 5.17). This suggests that neither location nor burial time period affected placement of sexed individuals. I would expect this pattern or lack of pattern for individuals in a group that favors lineage affiliation over burial location distinctions between the sexes. In terms of memory practices, both sexes would be equally important and carried similar weights in reinforcing and performing ties to a group, place, or earlier time.

Table 5.17. Frequencies of Sexes of Intrusive Burials at NAN Ranch by Room Block.

Room Block	Male	Female	Indeterminate	Total
East	6	5	8	18
South	0		4	4
Southeast	3	0	2	5
Total	9	5	14	28

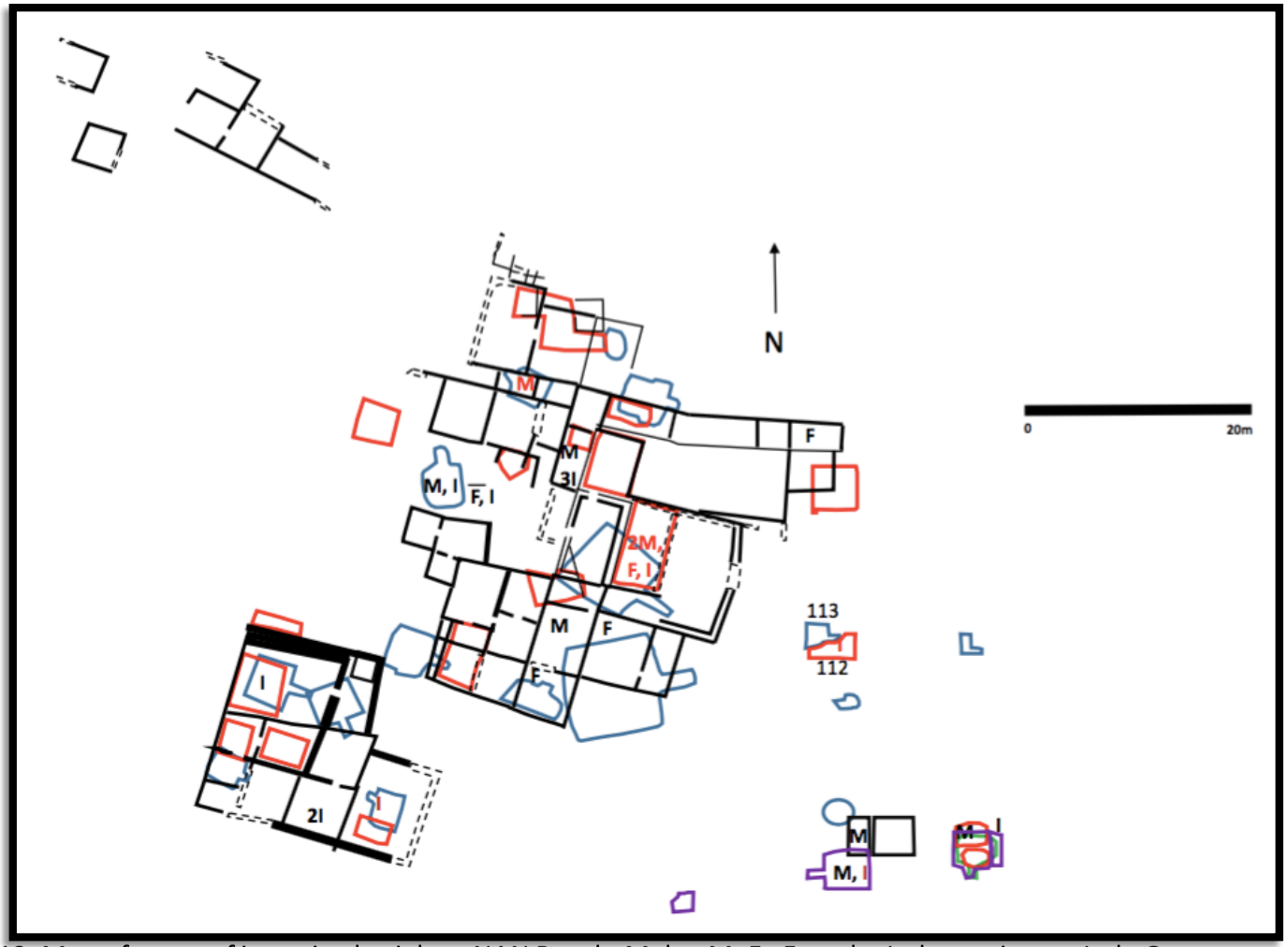

Figure 5.13. Map of sexes of intrusive burials at NAN Ranch. Male= M, F= Female, Indeterminate= Ind. Georgetown phase structures (A.D. 550-650) are marked in green, San Francisco (A.D. 650-750) in purple, Three Circle (A.D. 750-1000) in blue, Transitional (A.D. 900-1000) in red, and Classic (A.D. 1000-1130) in black.

Galaz. Like NAN Ranch intrusive burials, many burials at Galaz are categorized as Indeterminate (Table 5.18). Based on the data in Table 5.18, and excluding indeterminate individuals, there are no statistically significant differences in intrusive burial ages between room blocks (χ=0.563, p=0.453). Both males and females are present in the intrusive burial assemblages for the North room block, and indeed both sexes are among those present in Galaz Great Kiva 42A in the North room block (Figure 5.14), which again reinforces the notion that lineage affiliation rather than individual status governed this practice. Similar to the three old adults present in the Great Kiva 52 at NAN Ranch, old adults of both sexes were interred intrusively during the Classic and Postclassic periods into special ceremonial and communal contexts in North room block. This is true for both the burials in Kiva 42A and the Postclassic individuals interred near or on the floor of Room 15 which probably functioned as a corporate kiva.

Table 5.18. Frequencies of Sexes of Intrusive Burials at Galaz by Room Block.

Room Block	Male	Female	Indeterminate	Total
North	5	3	55	63
Southeast	1	0	3	4
Southwest	0	0	2	2
Total	9	5	14	69

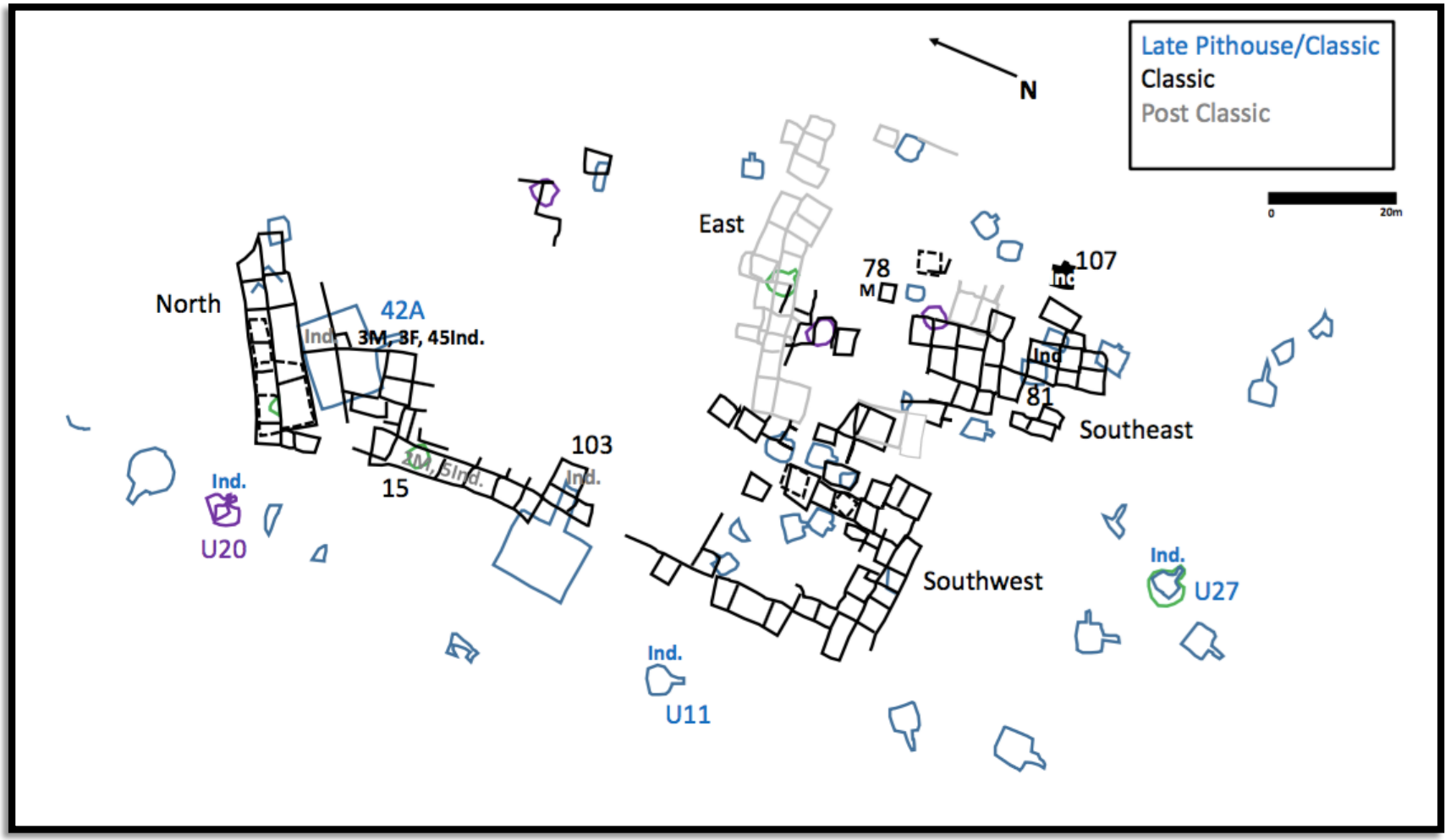

Figure 5.14. Map of sexes of intrusive burials at Galaz. Male= M, F= Female, Indeterminate= Ind. Georgetown phase structures (A.D. 550-650) are marked in green, San Francisco (A.D. 650-750) in purple, Three Circle (A.D. 750-1000) in blue, and Classic (A.D. 1000-1130) in black, and Postclassic (A.D. 1130-1350) in gray.

Mattocks. Overall, there are no statistical differences in the sexes of intrusive individuals at Mattocks. Based on the data present in Table 5.19, there were no significant differences present between room blocks (χ=15.453, p=0.218), although the chi-square is suspect. Men are present in each of the room blocks. Women are present in the 100s, 200s, and Nesbitt's Southeastern residential group (Table 5.19, Figure 5.15). While females are absent in the 300s and 400s, this can be explained by the presence of only one recorded intrusive burial in the 300s and the high number of individuals that could not be sexed definitively in the 400s room block. Again, this pattern of participation of both the sexes in intrusive burial memory connection and performance suggests a lineage rather than individual achievement connection with certain rooms and is practiced by inhabitants of all room blocks during the Classic period.

Table 5.19. Frequencies of Sexes of Intrusive Burials at Mattocks by Room Block.

Room Block	Male	Female	Indeterminate	Total
100s	2	1	3	6
200s	1	2	0	3
300s	1	0	0	1
400s	2	0	7	9
Southeast	3	2	2	7
Total	9	5	12	26

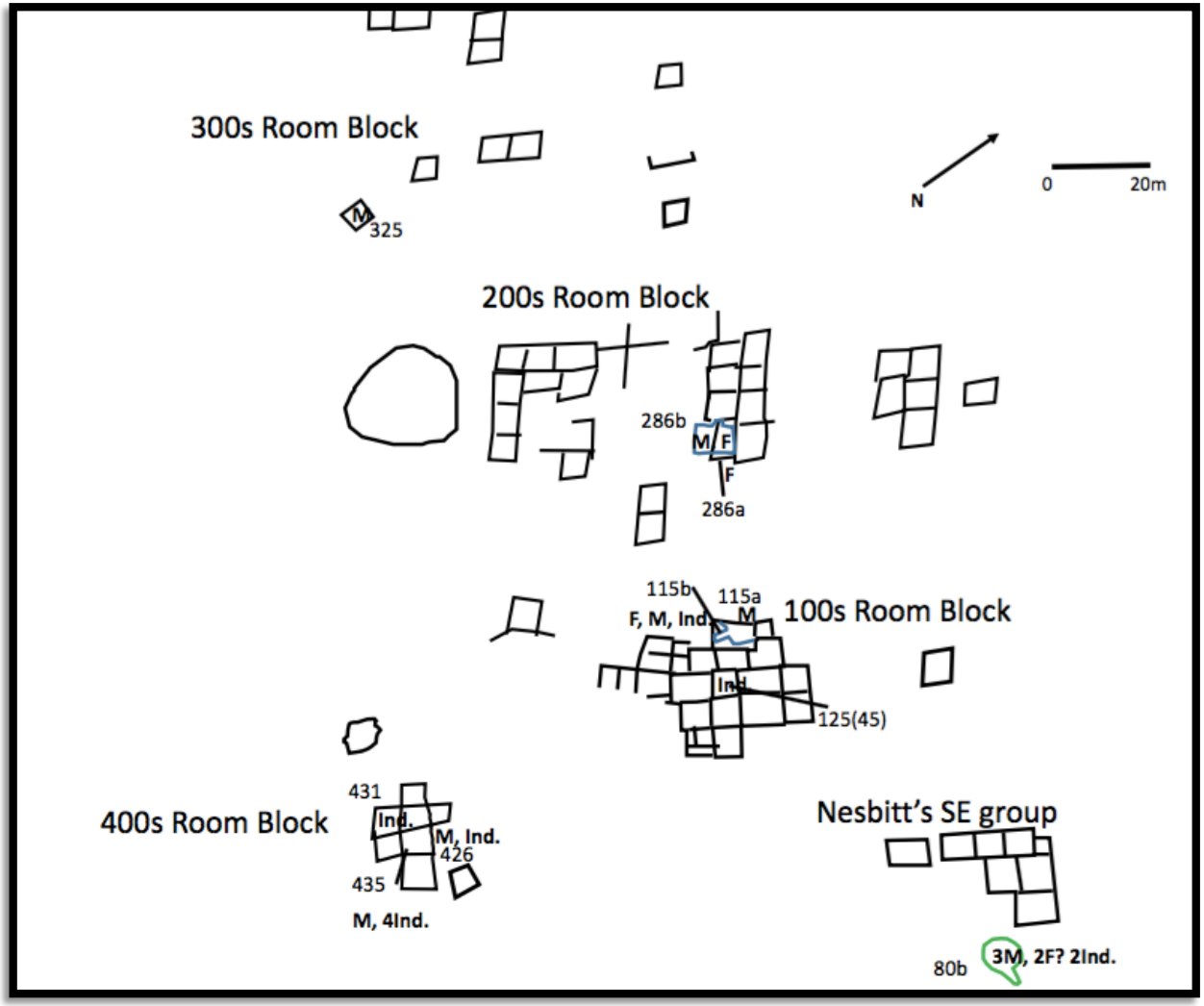

Figure 5.15. Map of sexes of intrusive burials at Mattocks. Male= M, F= Female, Indeterminate= Ind. Georgetown phase structures (A.D. 550-650) are marked in green, Three Circle (A.D. 750-1000) in blue, and Classic (A.D. 1000-1130) in black.

Room Function

While the age of the abandoned structure later used for intrusive burials is important, so is the function(s) of the room and the role it may have played in the process of cutting and adding later burials. I examine whether the functions or uses of certain rooms played a role in decision making process of inhabitants, and whether there are significant differences in the contexts of interred individuals among the room blocks. Generally, functional determinations can be made with regard to room size, floor features, and artifact assemblages. Four possible functions include domestic or habitation, ceremonial/communal, storage, and granary (Shafer 2003, 2010).

NAN Ranch. The majority (78.57%) of the NAN Ranch intrusive burial locations are within pithouses or rooms that functioned as dwellings (Table 5.20, Figure 5.16). This is to be expected given the overwhelming majority of the functions of the structures at the site are habitational. Habitation rooms would be ideal locations through which to reference one's lineage history of inhabitations.

Table 5.20. Frequencies of Intrusive Burial Contexts for Each Room Block at NAN Ranch.

Room Block	Domestic/Habitation	Storage	Granary	Ceremonial	Totals
East	13	0	1	5	20
South	4	0	0	0	4
Southeast	4	1	0	0	5
Totals	21	1	1	5	28

Despite room function not differing statistically from room block to room block for either the entire site occupation (χ=7.261, p=0.297; Table 5.20), a few burials in non-habitation rooms are worthy of discussion. Notably, Shafer (2003) recorded five

burials interred into the fill of Great Kiva 52 sometime in the Transitional period after the Great Kiva was decommissioned and burned and before the construction of overlying Classic Room 57. They are the only burials in rooms of ceremonial or communal importance, and they are located within the East room block. Other Classic corporate kivas were not used as intrusive burial locales, perhaps because they were still in use. Also interesting is the lack of burials intrusive or contemporary with the other Three Circle Great Kiva 43, which may have replaced 52 after it was decommissioned in the late ninth century, although construction dates are conflicting (Shafer 2003:34).

Two burials, one in Room 76 in the East room block and one in the Southeast room block Room 92 are noteworthy in that they were placed in rooms that never functioned as living areas and were a granary and storage area respectively. Storage areas were often connected to core rooms designated as living areas as part of residential suites. However, Room 92 is part of the isolated pueblo room pair with Room 93, and the granary that is Room 76 was not attached to living quarters. Room function as granaries for these two rooms is thus less likely an indicator for the presence or absence of intrusive burials than is the general room location. Room 92, however, slightly superimposes a strange circular shallow Pithouse 71 that dates to the Three Circle phase. The function of Room 71 is unknown, but it has been interpreted as both a menstrual hut or as sweat bath for curing and purification rituals due to its isolation from many other Classic structures (Shafer 2003:36).

Lastly is the unique context of the three intrusive burials in the San Francisco Pithouse 86. Beyond being one of only four San Francisco age structures, this locale also houses the only burial currently interpreted as representing a shaman or spiritual leader at the site. Burial 127 consists of a seated adult male, placed in a small alcove on the north end of Pithouse 86, accompanied by a cloudblower-type stone pipe, a biface, a turtle plastron, Olivella shell beads, and a quartz crystal (Shafer 2003:30). Perhaps the two later burials within this same general domain are in reference to the special activities or rituals performed by this individual and the status he once possessed in the past.

In sum, there are no significant differences between room blocks with regards to the function of the contexts that housed intrusive burials. Most are in rooms or pithouses used for habitation and would be good locations with which to reference one's connection to past ancestral places.

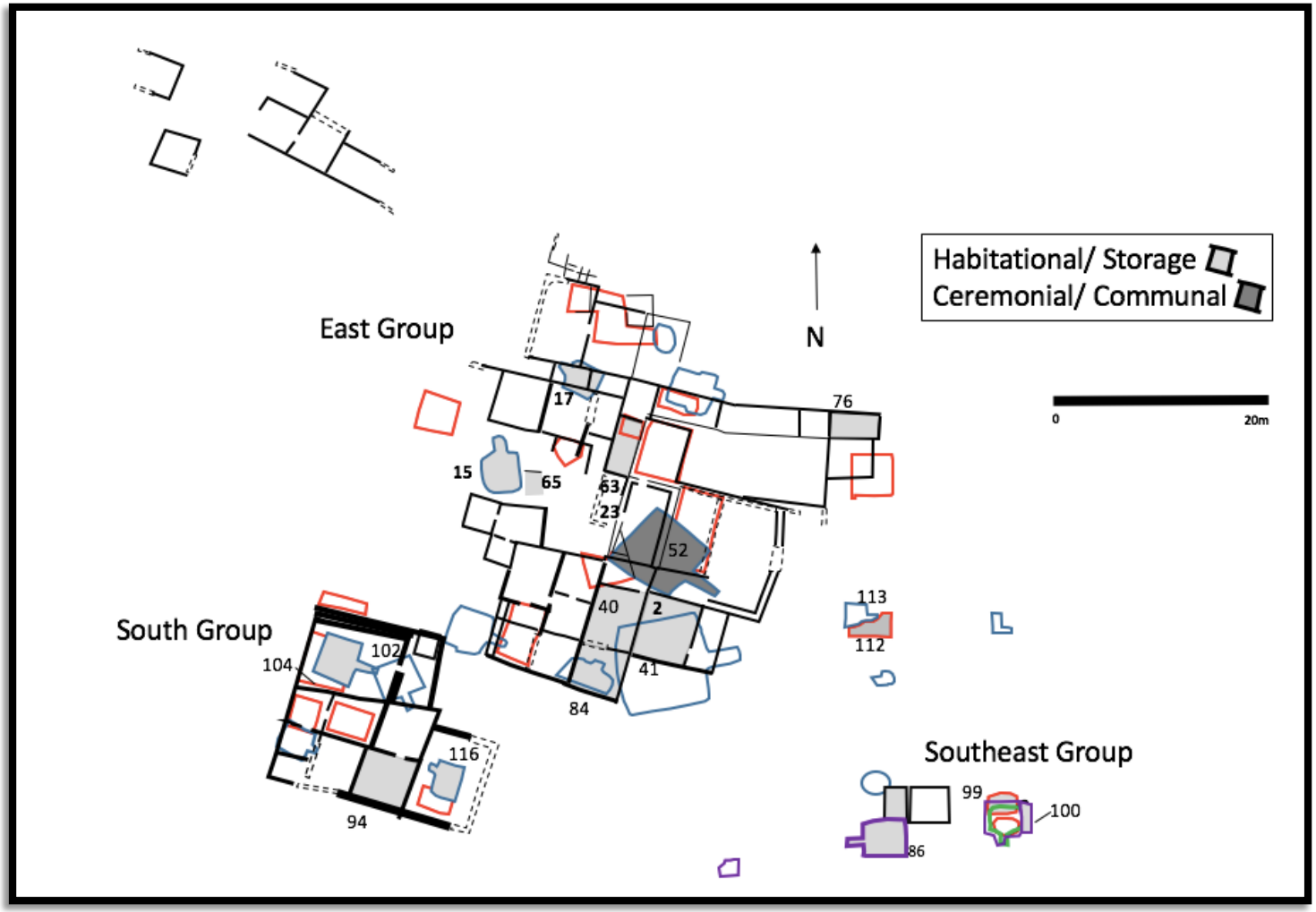

Figure 5.16. Map of the contexts of rooms with intrusive burials at NAN Ranch. Georgetown phase structures (A.D. 550-650) are marked in green, San Francisco (A.D. 650-750) in purple, Three Circle (A.D. 750-1000) in blue, Transitional (A.D. 900-1000) in red, and Classic (A.D. 1000-1130) in black.

Galaz. More than the other sites, significant differences (χ=32.014, p=0.001; Table 5.21) occur between room blocks with regards to intrusive burials and room function. Subsequent post hoc pair-wise tests also result in significant differences between the North and Southeast room blocks (χ=14.691, p=0.001), and North and Southwest room blocks (χ=31.468, p=0.001). These differences are extremely unlikely to be the results of the vagaries of random sampling. No statistically significant differences in the room function of intrusive burials occur between the Southeast and Southwest room blocks. The placement of all North room block intrusive burials into earlier ceremonial or communal rooms accounts for the differences between the North and two other room blocks, and the lack of differences between the Southeast and Southwest room blocks with regards to room functions.

Table 5.21. Frequencies of Intrusive Burial Contexts for Each of the Room Blocks at Galaz.

Room Block	**Domestic/ Habitation**	**Storage**	**Granary**	**Ceremonial**	**Totals**
North	2	0	0	61	63
Southeast	2	0	0	2	4
Southwest	2	0	0	0	2
Totals	6	0	0	63	69

Those intrusive burials that date to the Late Pithouse period were all placed within habitational pithouses. During the Classic period, the majority (76.81%) are interred in ceremonial or communal structures (Table 5.21). This includes the 51 burials in Great Kiva 42A and two within Classic Kiva 107. During the Postclassic period, all intrusive burials occur within ceremonial structures. Both used as intrusive

burial locations during the Postclassic period, Room 84 overlays Great Kiva 42A, and Room 15 is arguably a small corporate kiva superimposed over a Georgetown pithouse.

It is interesting that site-wide, intrusive burials are more likely to occur within ceremonial or communally important contexts than within the dwellings of ancestors. Intrusive burials interred in the North room block overwhelmingly occur within ceremonial or communal contexts (Figure 5.17). Only two burials do not follow this pattern - Pithouse 20's single intrusive interment and that in Room 103. That said, Room 103 does superimpose the end of Three Circle Great Kiva 73's entryway and may be indirectly associated with a ceremonial structure. The North room block did not have exclusive rights to intrusive burials in ceremonial structures. Inhabitants presumably belonging to the Southeast room block did inter two individuals into Classic Kiva 107, which is much smaller and later than Great Kiva 42A. However, only one of the three intrusive burial locations are considered to have functioned as ceremonial space. Similarly, all the burials in the Southwest room block were in structures used for habitation.

In sum, there are significant differences between Galaz room blocks with regards to the function of rooms with later intrusive burials. These differences occur between the North and Southeast and Southwest room blocks, but not between the Southeast and Southwest room blocks. The presence of all of the intrusive burials in the North room block in ceremonial or communal rooms, and the closer association of

intrusive burials in domestic or habitational contexts for the other two room blocks accounts for the statistical differences.

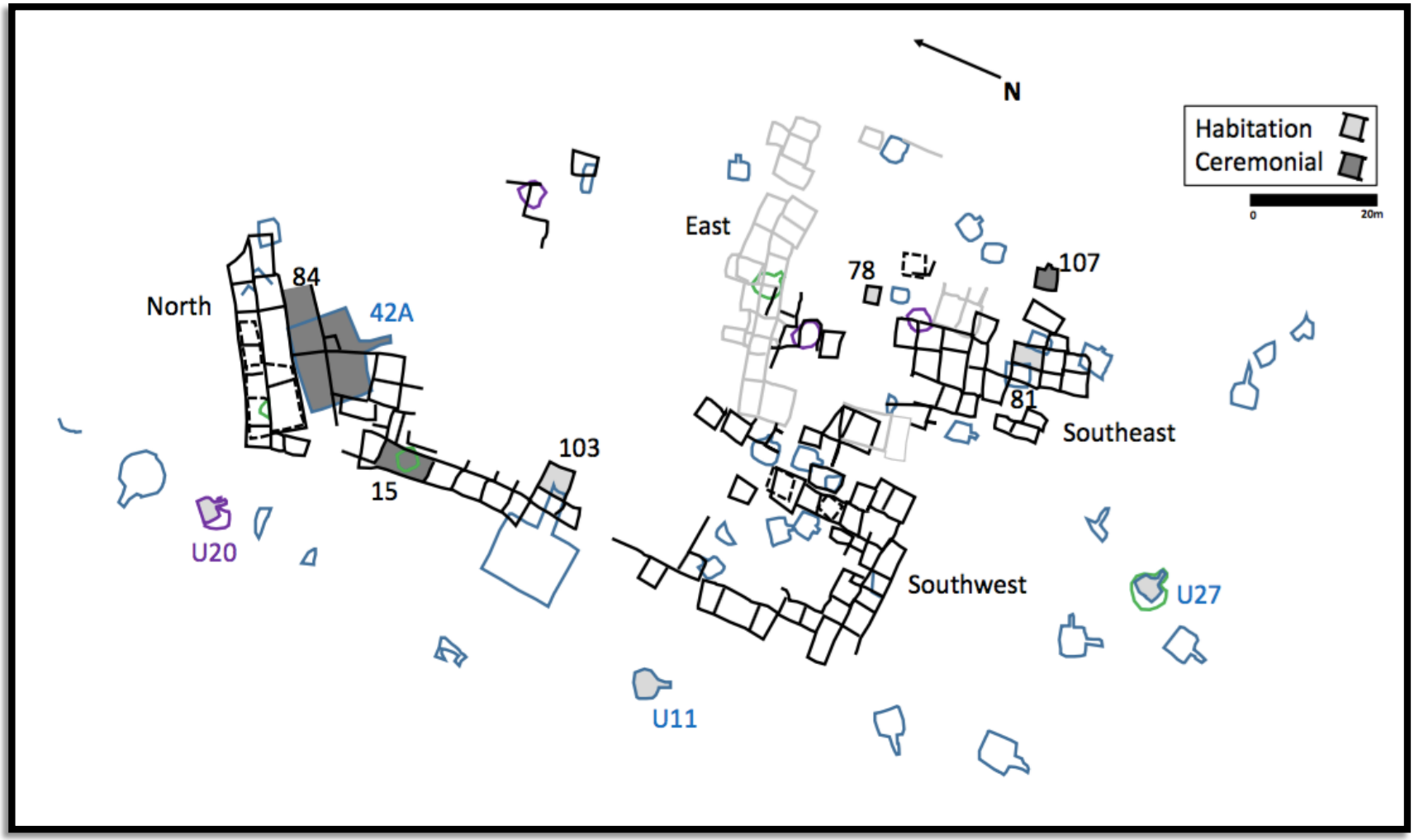

Figure 5.17. Map of the contexts of rooms with intrusive burials at Galaz. Georgetown phase structures (A.D. 550-650) are marked in green, San Francisco (A.D. 650-750) in purple, Three Circle (A.D. 750-1000) in blue, and Classic (A.D. 1000-1130) in black, and Postclassic (A.D. 1130-1350) in gray.

Mattocks. Not surprisingly, the majority (88.46%) of Mattocks site intrusive burials are within structures associated with domestic and habitation activities (Table 5.22), and but significant differences in room functions do exist at the site level (χ=26.000, p=0.001). Post-hoc pair-wise comparisons only resulted in a significant difference between the 200s and the 100s room block (χ=9.000, p=0.03), the 200s and 400s room block (χ=12.000, p=0.001), and 200s and Southeast room blocks (χ=10.000, p=0.002). This difference likely resulted from the correlation with intrusive burials in the 200s room block being placed in communally important rooms. No statistically significant differences occurred between the 100s and 400s room block (χ=0, p=1.000), nor between the 100s and Southeast room blocks (χ=0, p=1.000), nor the 400s and Southeast room blocks (χ=0, p=1.000) as intrusive burials in those room blocks all occurred within domestic contexts. Again, the 300s room block was not factored in to pair-wise comparisons as it is represented by a single room.

Table 5.22. Frequencies of Intrusive Burial Contexts for Each of the Room Blocks at Mattocks.

Room Block	**Domestic/ Habitation**	**Storage**	**Granary**	**Ceremonial/ Communal**	**Totals**
100s	6	0	0	0	6
200s	0	0	0	3	3
300s	1	0	0	0	1
400s	9	0	0	0	9
Southeast	7	0	0	0	7
Totals	23	0	0	3	26

The focus on previously occupied habitation structure is congruent with groups performing a social memory maintenance with those earlier structures. The only burials to not follow this are those in Room 286a, which are also earlier than many of the other intrusive burials at Mattocks (Figure 5.18). According to Gilman and LeBlanc (2017:193, 264) this room along with the granary in adjacent Room 41 might have functioned as a communal storage area, given the proximity of the room block to Great Kiva 213 to the west.

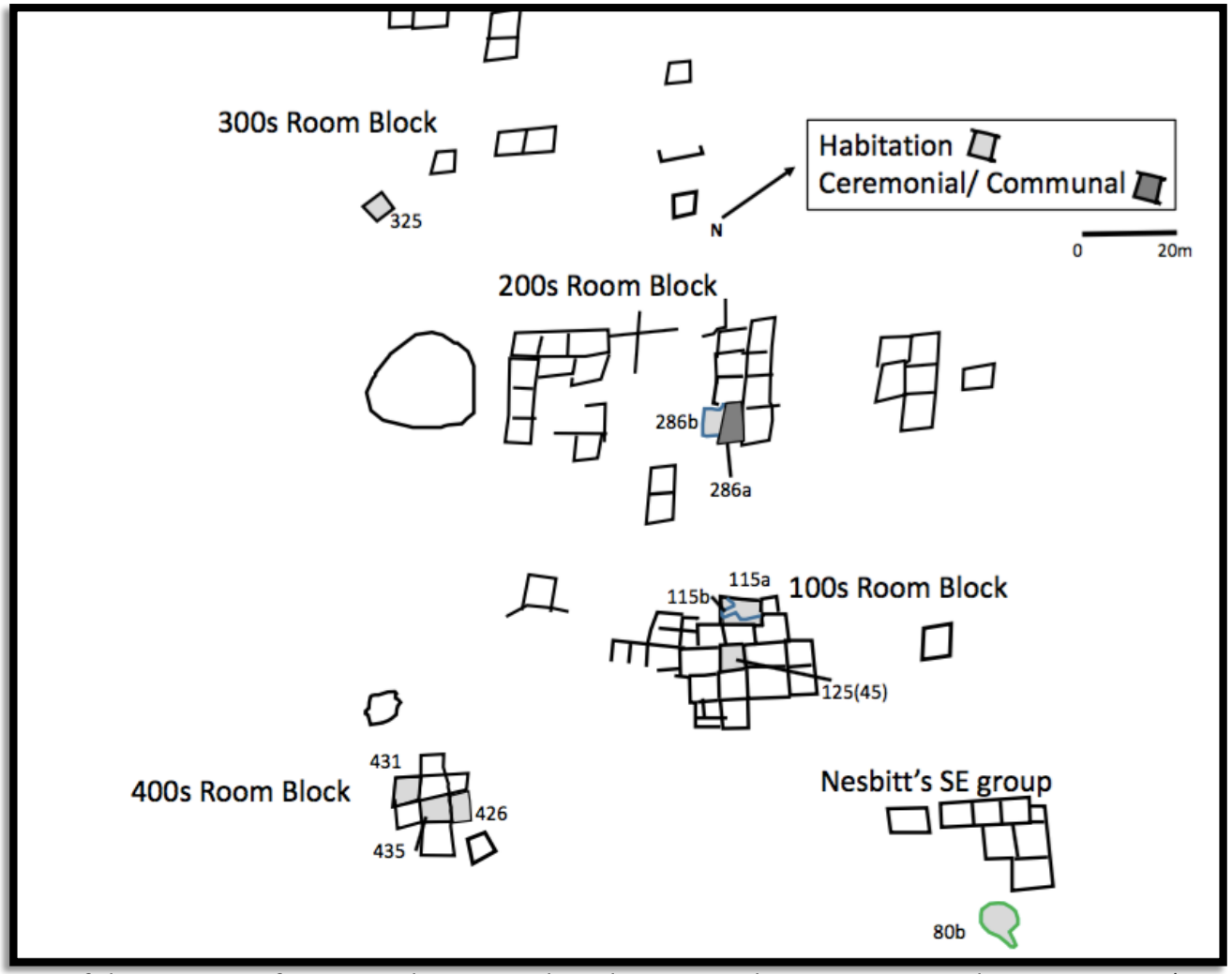

Figure 5.18. Map of the contexts of rooms with intrusive burials at Mattocks. Georgetown phase structures (A.D. 550-650) are marked in green, Three Circle (A.D. 750-1000) in blue, and Classic (A.D. 1000-1130) in black.

Presence and Absence of Accompanying Vessels

Mortuary items such as ceramic vessels can be important not only for dating through stylistic changes, but as an additional line of evidence to compare intrusive burials between room blocks. Some sites such as NAN Ranch have slight differences in accompanying vessel counts between room blocks. One possible explanation for the low frequency of accompanying vessels in intrusive burials at NAN Ranch is that they and their styles would be out of place within their older structure contexts, detracting from the significance of the action and performance.

NAN Ranch. Based on the data present in Table 5.23, there are no statistically significant difference between room blocks concerning the relative presence or absence of associated ceramic vessels with intrusive burials (χ=2.105, p=0.349). Interestingly, 82.4% of the NAN Ranch intrusive burials are without any associated vessels (Figure 5.19). The intrusive assemblage contrasts with the larger mortuary assemblage for which 55% of Classic burials contain at least one ceramic vessel, and 59% of Late Pithouse/Transitional burials have associated ceramics, 20% of which have multiple vessels (Shafer 2003:149-150). This pattern suggests that perhaps vessels were intentionally left out of intrusive burials. If inhabitants were making the effort to bury deceased members in earlier contexts and thus associate them with earlier temporalities and people, then a vessel of contemporaneous design might act as an anachronism and take away from the overall references of the act.

Table 5.23. Frequencies of Intrusive Burials with Vessels for Each Room Block at NAN Ranch. No data on one burial from 63A and one from 102 make the total assemblage n=26.

Room Block	Burials with Vessels Present	Burials with Vessels Absent	Total
East	5	13	18
South	0	3	3
Southeast	0	5	5
Total	5	21	26

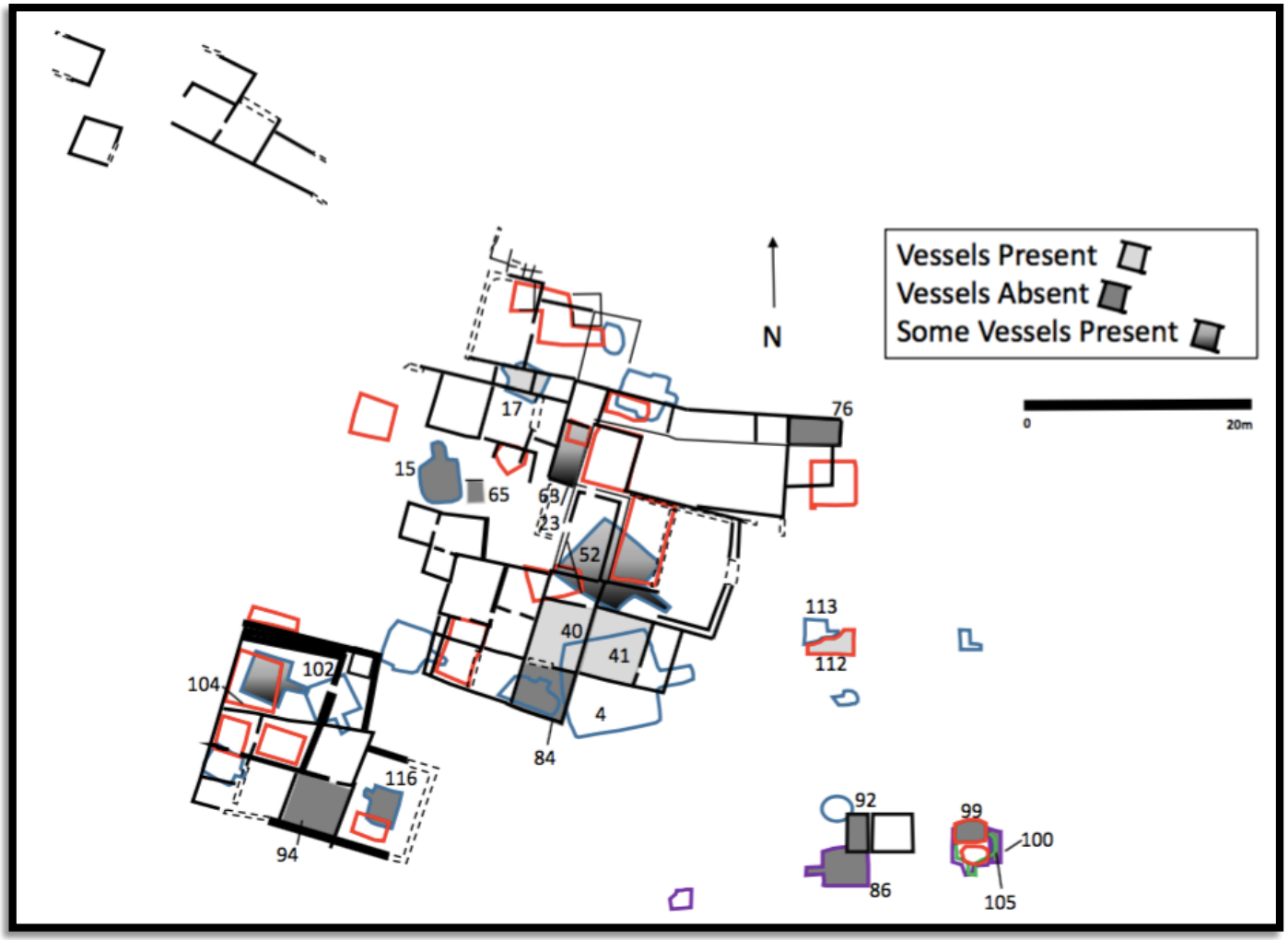

Figure 5.19. Map of the intrusive burials with associated ceramics at NAN Ranch. Georgetown phase structures (A.D. 550-650) are marked in green, San Francisco (A.D. 650-750) in purple, Three Circle (A.D. 750-1000) in blue, Transitional (A.D. 900-1000) in red, and Classic (A.D. 1000-1130) in black.

Galaz. There are observable differences in the presence or absence of vessels accompanying intrusive burials in any given Galaz site room block (χ=16.948, p=0.002; Table 5.24). Post hoc pair-wise tests also result in significant differences between the North room and Southeast room block with regards to the presence or absence of associated ceramics in intrusive burials (χ=16.429, p=0.003). Statistically, the differences between the North and Southwest room blocks (χ=0.024, p=0.876), and the Southeast and Southwest room blocks are indistinguishable from the vagaries of random sampling (χ=0.750, p=0.687). The differences suggest that the intrusive burials of the North room block are more often associated with accompanying ceramic vessels than the Southeast room block, although the chi-square is suspect due to small cell counts for the Southeast room block.

Table 5.24. Frequencies of Intrusive Burials with Vessels for Each Room Block at Galaz. No data was available for one burial from Room 81 so it was excluded from the analysis, thereby making the total 68 rather than 69.

Room Block	**Burials with Vessels Present**	**Burials with Vessels Absent**	**Total**
North	35	28	63
Southeast	1	2	3
Southwest	1	1	2
Total	37	32	68

About half of each room block's intrusive burials contain vessels and about half do not (Table 5.24, Figure 5.20). Interestingly, there is a Boldface Black-on-white vessel dating to the Late Pithouse period (A.D. 800-950) in one of the burials in the fill of Great Kiva 42A. This is interesting as it an heirloom bowl that was placed in a later

intrusive burial. Also of note, the intrusive assemblage may differ in average vessels counts from the overall burial assemblage. Anyon and LeBlanc (1984:182) state that the burials interred within the fill of Kiva 42A had fewer vessels per burial than the average burial at Galaz (less than one vessel per burial on average.

In sum, significant differences occur between the room blocks with regards to the relative presence or absence of ceramic vessels in intrusive burials. These differences occur between the Southeast and North room blocks only. The differences suggest that the intrusive burials of the North room block are more often associated with accompanying ceramic vessels than the Southeast room block.

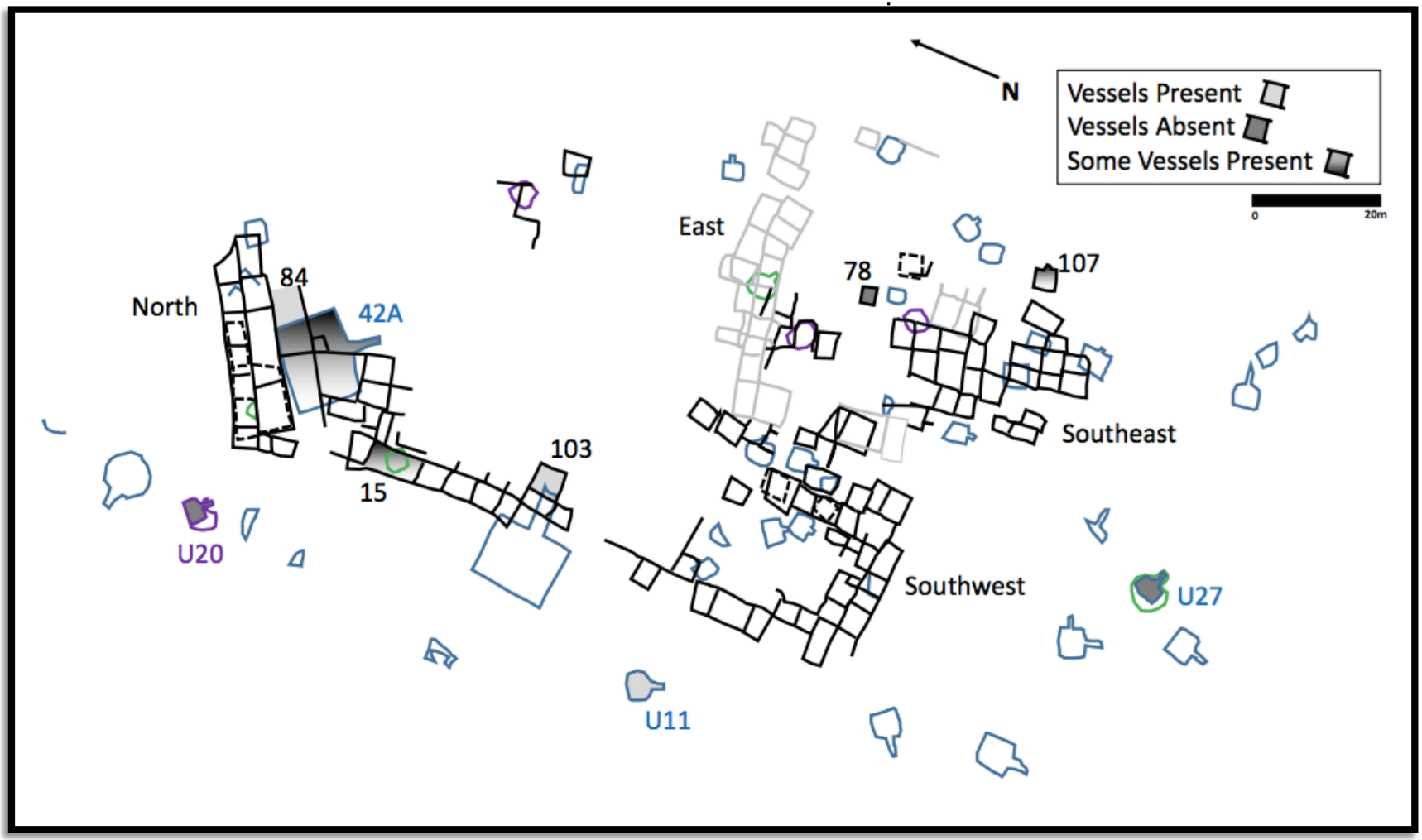

Figure 5.20. Map of the intrusive burials with associated ceramics at Galaz. Georgetown phase structures (A.D. 550-650) are marked in green, San Francisco (A.D. 650-750) in purple, Three Circle (A.D. 750-1000) in blue, and Classic (A.D. 1000-1130) in black, and Postclassic (A.D. 1130-1350) in gray.

Mattocks. Apparent in Table 5.25 below, 84.62 percent of intrusive burials were associated with ceramics. This pattern coincides with the larger pattern seen site wide for the entire burial assemblage of one vessel per burial on average (Anyon and LeBlanc 1984:176; Shafer 2003:151). Based on the data present in Table 5.25, no significant differences are observed between room blocks concerning vessel presence (χ=8.929, p=0.063), although the sample size makes the chi-square suspect. The only room blocks to contain intrusive burials without vessels are the 100s (two burials in Room 125), the 300s (one burial in Room 325), and the 400s (one burial in Unit 426). Unlike NAN Ranch, most intrusive burials at Mattocks contained vessels. Further, the seven burials in the earliest Georgetown structure contain Classic style vessels and thus were anachronistic with their surroundings (Figure 5.21).

Table 5.25. Frequencies of Intrusive Burials with Vessels for Each Room Block at Mattocks.

Room Block	**Burials with Vessels Present**	**Burials with Vessels Absent**	**Total**
100s	4	2	6
200s	3	0	3
300s	0	1	1
400s	8	1	9
Southeast	7	0	7
Total	22	4	26

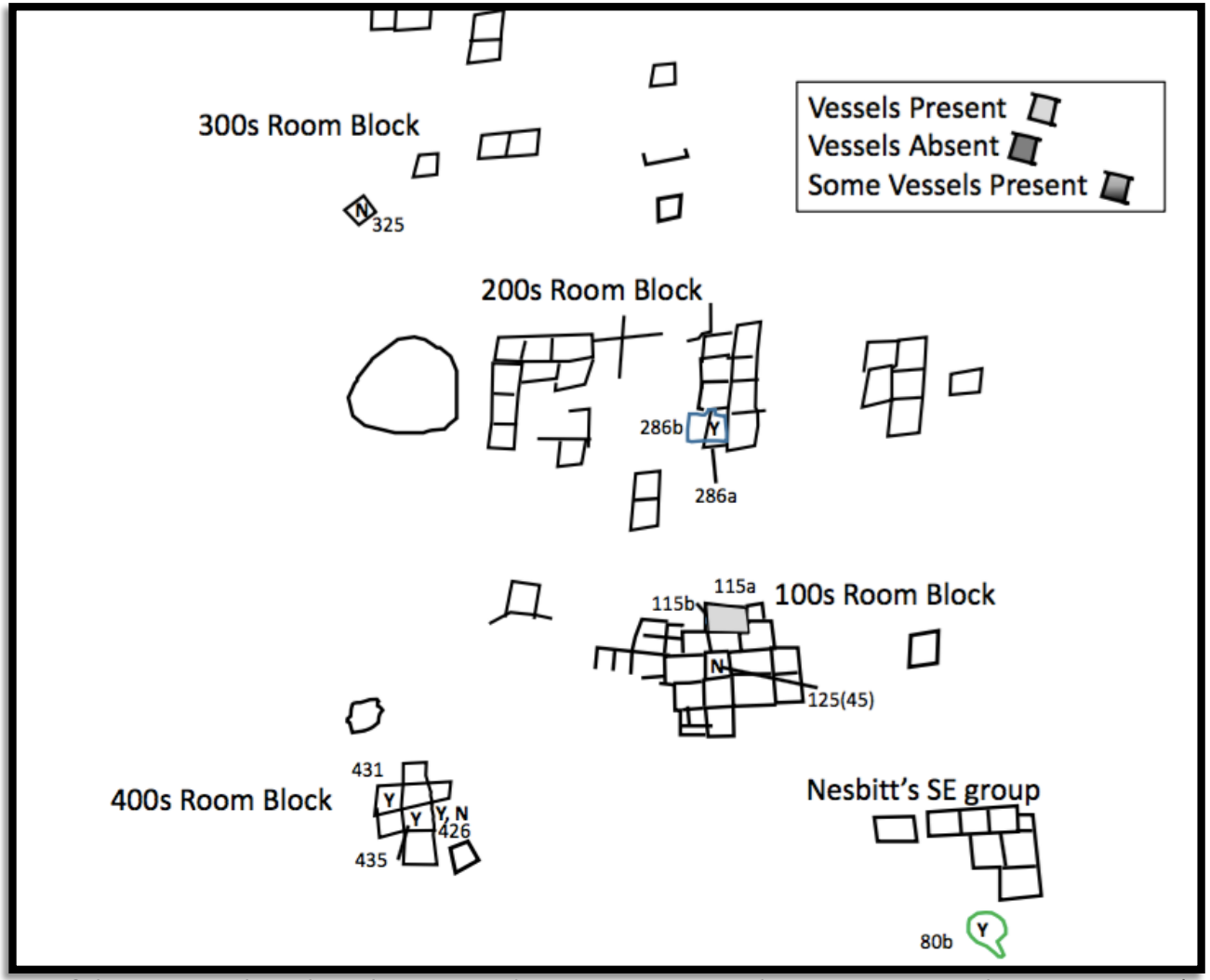

Figure 5.21. Map of the intrusive burials with associated ceramics at Mattocks. Georgetown phase structures (A.D. 550-650) are marked in green, Three Circle (A.D. 750-1000) in blue, and Classic (A.D. 1000-1130) in black.

Burials in Superimposed Rooms

As intrusive burials into earlier contexts and architectural superposition are both social memory processes involving the addition of something later into or above something from the recent or distant past, it follows that intrusive burials and architecture may be correlated. That is, intrusive burials are perhaps more likely to be interred below floors within structures. If these structures superimposed other earlier structures, then the intrusive burials impact abandoned room fills, walls, and floors. In this section, I examine differences in the locations of intrusive burials in rooms superimposed or not to establish whether room history through superposition is a contributing factor for intrusive placement for some groups.

NAN Ranch. Even though it would be easier and more likely to bury someone intrusively from beneath a floor of a superimposed structure, most (75%) intrusive burials at NAN Ranch were superimposed (Table 5.26). I included only structures superimposed over other structures and excluded middens and activity areas overlying earlier structures. Based on the data present in Table 5.26, intrusive burial assemblages do not differ significantly from room block to room block when the presence or absence of a superimposed context is concerned (χ=3.018, p=0.221). The only differences in presence or absence of intrusive burials in superimposed contexts, although not statistically significant, occur between the Southeast and the other residential groups. The Southeast is the only group in which all of its intrusive burials occurred in structures that either were superimposed by later structures or were in

those later superimposed structures (Figure 5.22). That said, the differences are not statistically significant.

Table 5.26. Frequencies of Intrusive Burials Present in Superimposed Rooms or Non-Superimposed Rooms at NAN Ranch.

Room Block	Superimposed	Not Superimposed	Total
East	14	5	19
South	2	2	4
Southeast	5	0	5
Total	21	7	28

Most of the intrusive burials in the East room block were in superimposed contexts, and some rooms like Rooms 15 and 65 in the East room block had a Classic midden over them (Figure 5.22). Shafer (2003:146) notes that many intramural burials in superimposed rooms penetrated or intruded upon the floors of earlier structures, sometimes even obliterating the earlier floors in some parts such as Room 29 in the South room block. However, only half of the intrusive burials within the South room block were placed in superimposed contexts.

In sum, intrusive burial assemblages do not differ significantly from room block to room block when the presence or absence of a superimposed context is concerned. Most intrusive burials were placed in superimposed contexts creating continuity between the present and the past. Slight differences are observed between the Southeast and other room blocks at NAN Ranch, in that all of the intrusive burials for the founding Southeast room block are in superimposed or superimposing structures.

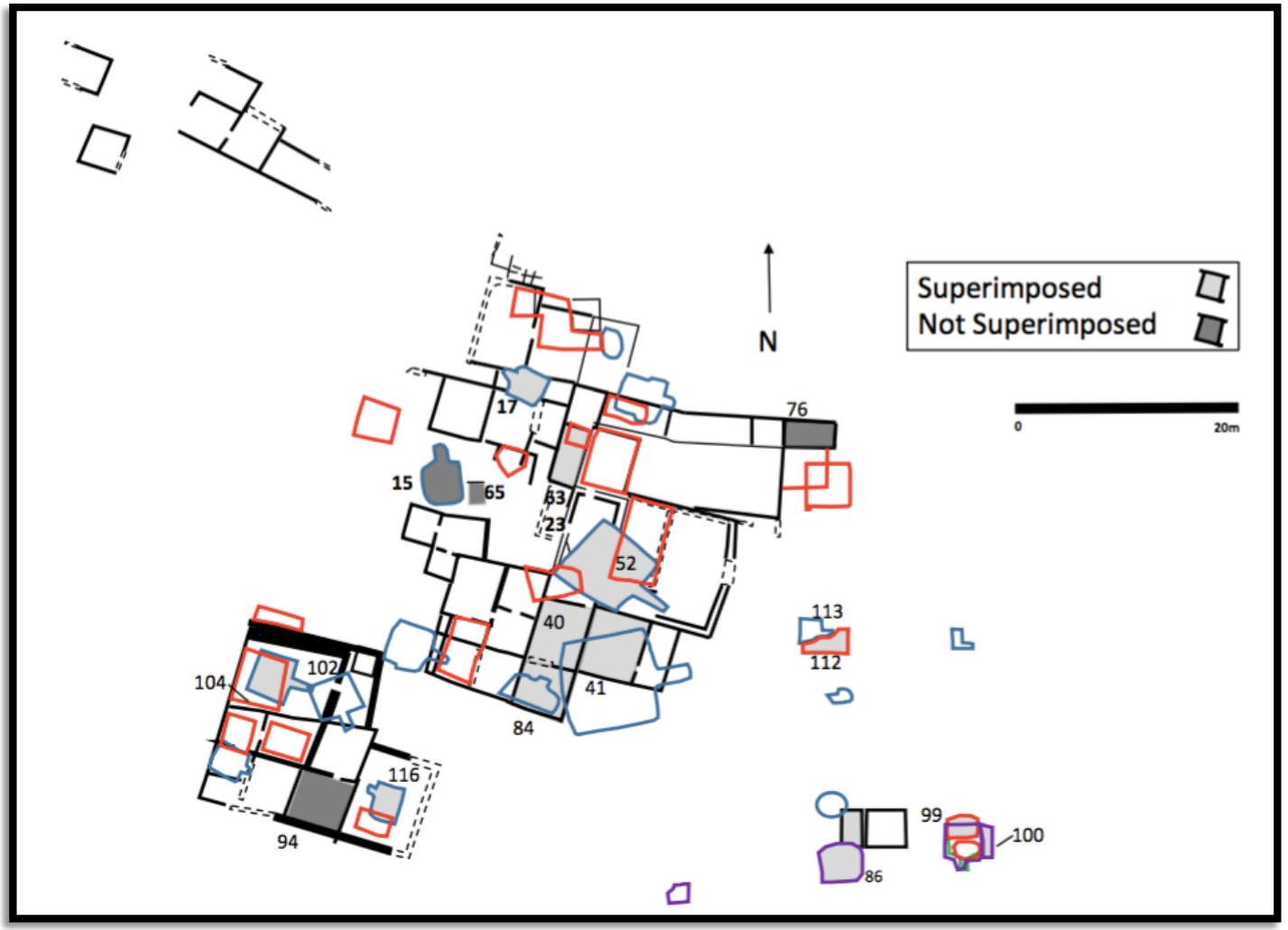

Figure 5.22. Intrusive burials in superimposed and non-superimposed contexts at NAN Ranch. Georgetown phase structures (A.D. 550-650) are marked in green, San Francisco (A.D. 650-750) in purple, Three Circle (A.D. 750-1000) in blue, Transitional (A.D. 900-1000) in red, and Classic (A.D. 1000-1130) in black.

Galaz. There are statistically significant differences between Galaz room blocks at the site level with regards to the frequency in which intrusive burials were placed within superimposed contexts (χ=46.111, p=0.001; Table 5.27). Post hoc pair-wise comparisons also resulted in significant differences between the North and Southeast room blocks (χ=3.018, p=0.001), and the North and Southwest room blocks (χ=39.992, p=0.001). However, no significant differences were observed between the Southeast and Southwest room blocks with regards to the superimposed or non-superimposed contexts (χ=0.375, p=0.540). These differences likely arise from the fact that all of the intrusive burials in the North room block are located within superimposed rooms.

Nearly all (n=65) Galaz intrusive burials at the site level occur within superimposed rooms (Table 5.27). Much of this correlation with superimposed contexts has to do with the majority of intrusive burials coming from the North room block, and all of the intrusive burials in the North room block occur in superimposed context (Figure 5.23). This pattern is not so much the case with the other two room blocks. Two rooms in the Southeast room block (Classic Kiva 107 and isolated Room 78), and one pithouse belonging to the Southwestern room block (Pithouse 11) lack superpositioning.

Table 5.27. Frequencies of Intrusive Burials Present in Superimposed Rooms or Non-Superimposed Rooms at Galaz.

Room Block	Superimposed	Not Superimposed	Total
North	63	0	63
Southeast	1	3	4
Southwest	1	1	2
Total	65	4	69

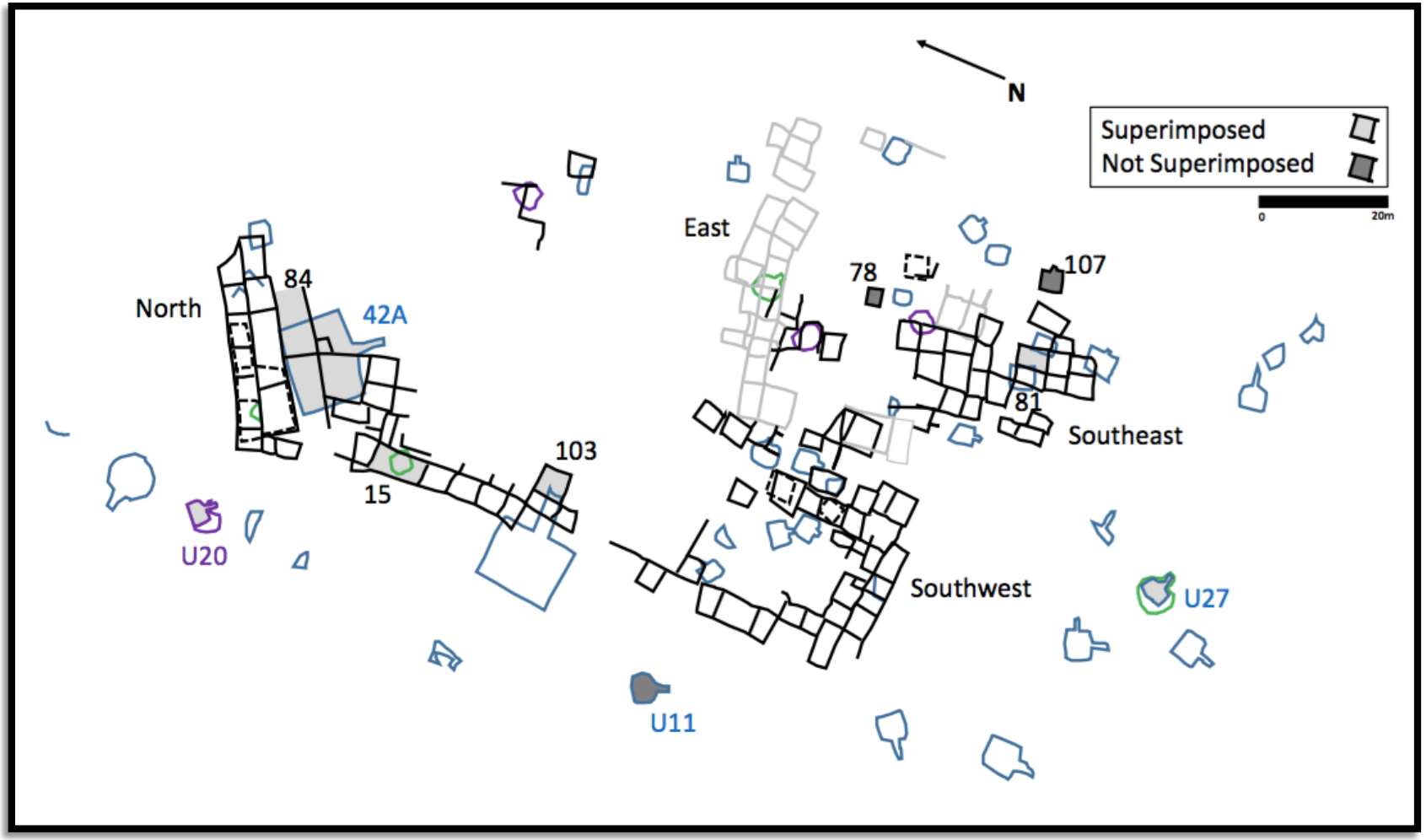

Figure 5.23. Intrusive burials in superimposed and non-superimposed contexts at Galaz. Georgetown phase structures (A.D. 550-650) are marked in green, San Francisco (A.D. 650-750) in purple, Three Circle (A.D. 750-1000) in blue, and Classic (A.D. 1000-1130) in black, and Postclassic (A.D. 1130-1350) in gray.

Mattocks. While the majority of intrusive burials are not located in superimposed structures (73.1%), there are detectable differences at the site level between room blocks (χ=19.233, p=0.001; Table 5.28), although the chi-square is suspect. The 100s and 200s room blocks differ significantly from the remaining room blocks as the only instances of superposition, even though earliest structure is part of Southeast room block. The superpositioning of Rooms 115 and 286 differ from the rest of the site where all other burials date to the Classic and are interred within Classic structures not superimposed.

Table 5.28. Frequencies of Intrusive Burials Present in Superimposed Rooms or Non-Superimposed Rooms at Mattocks.

Room Block	**Superimposed**	**Not Superimposed**	**Total**
100s	4	2	6
200s	3	0	3
300s	0	1	1
400s	0	9	9
Southeast	0	7	7
Total	7	19	26

Overall, the lack of superposition contexts for intrusive burials at the site is intriguing and affects this measure as compared to the correlation of intrusive burials in superimposed structures at other sites (Table 5.28). Only two rooms, 115 and 286 (Figure 5.24), are superimposed over an earlier Three Circle phase structure and contain later, although not much later burials as is the case for Room 286. I only considered formal structures in superposition although many rooms were built over

existing ramada (Room 426) and extramural surfaces or were later covered by Classic midden/extramural work surface (80b). It is the presence of the later midden that distinguishes the seven intrusive burials placed within 80b. Not only are these intrusive burials placed in the earliest and only structure at the site, but having to dig through a midden and extramural activity area to find a structure perhaps not visible from the surface, suggests a level of intimacy and knowledge of the locale unequaled by other groups at the site.

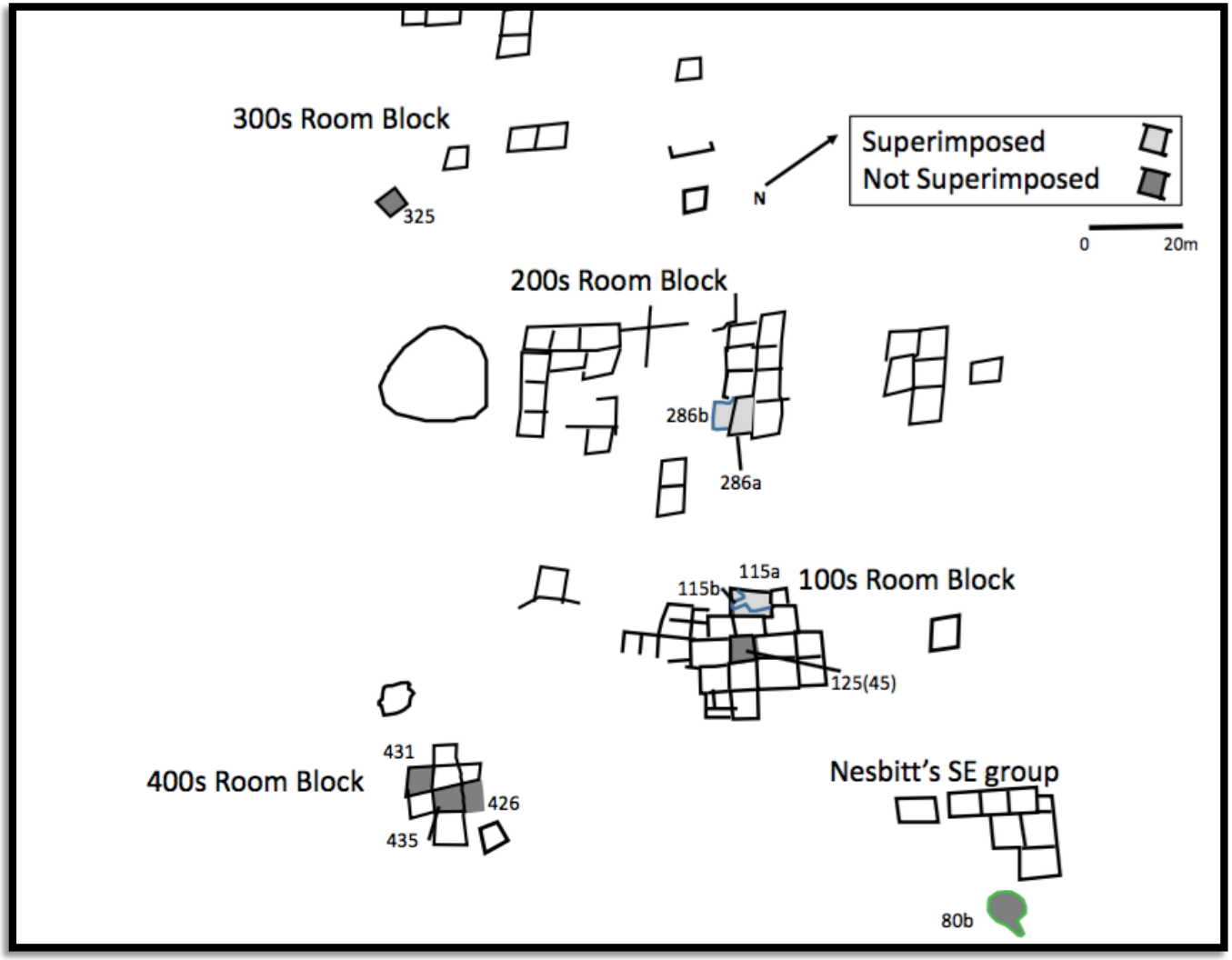

Figure 5.24. Intrusive burials in superimposed and non-superimposed contexts at Mattocks. Georgetown phase structures (A.D. 550-650) are marked in green, Three Circle (A.D. 750-1000) in blue, and Classic (A.D. 1000-1130) in black.

Burials in Rooms with Other Burials

Shafer (2003) noted intramural rooms being used potentially as formal corporate or lineage cemeteries due to their higher than expected frequencies of sub-floor inhumations. The South room block at NAN Ranch is a primary example of this. This phenomenon is also observed and discussed at Çatalhöyuk (Hodder and Pels 2010; Kuijt 2001; Kuijt et al. 2011). Russell (2016:86-87) recently examined Mimbres intramural burial presence or absence for each room at Cameron Creek, Galaz, Mattocks, NAN Ranch, Swarts, Harris, and Wind Mountain, to ascertain if some groups used the placement of many individuals in certain rooms to establish, demonstrate, or allege antecedence over others at a given site. Russell found that occasionally differences occurred between room blocks but most often antecedence was practiced at the household level. I am interested in examining whether there is a correlation between intrusive burial presence and rooms with other burials possibly those that were used inter-generationally as described above. In other words, are intrusive burials most frequently interred into rooms with their own long histories as a way to maintain intergenerational continuity and memory?

NAN Ranch. There is a cremation cemetery in the East plaza area at NAN Ranch that was used for well over a century, as evidenced by the diagnostic ceramic designs of associated ceramics, and may have had some lineage connection (Shafer 2003:155). Core rooms such as 28 and 29 in the South room block contain many individuals some over 30 individual burials. This does set a precedent to further explore areas that may have been depositories for inhumations for many generations of affiliated individuals.

As Table 5.29 demonstrates, there is roughly equal number of total intrusive burials across the site being interred in rooms with other burials that may have functioned as lineage cemeteries and room blocks do not differ significantly concerning the presence of other burials (χ=1.539, p=0.463). This fairly even pattern persists at the room block level, with each room block containing intrusive burials in rooms with and without other burials, and coincides with Russell's (2016:113-116) finding of a lack of significant differences in frequencies of intramural burials per domestic room at the room block level.

Table 5.29. Frequencies of NAN Ranch Intrusive Burials Interred in Rooms Where Other Burials are Present or Absent.

Room Block	**Earlier Burials Present**	**Earlier Burials Absent**	**Total**
East	10	9	19
South	3	1	4
Southeast	3	2	5
Total	16	12	28

For each of the room blocks, inhabitants more often placed individuals intrusively into contexts with other extant burials (Figure 5.25). Interestingly, Pithouse 86 in the Southeast residential room block contains other non-intrusive burials, namely a possible shaman burial placed in his own niche (Shafer 2003:127). Further, the lack of other burials in Great Kiva 52 adds significance to those four individuals that were placed there during the later Transitional period.

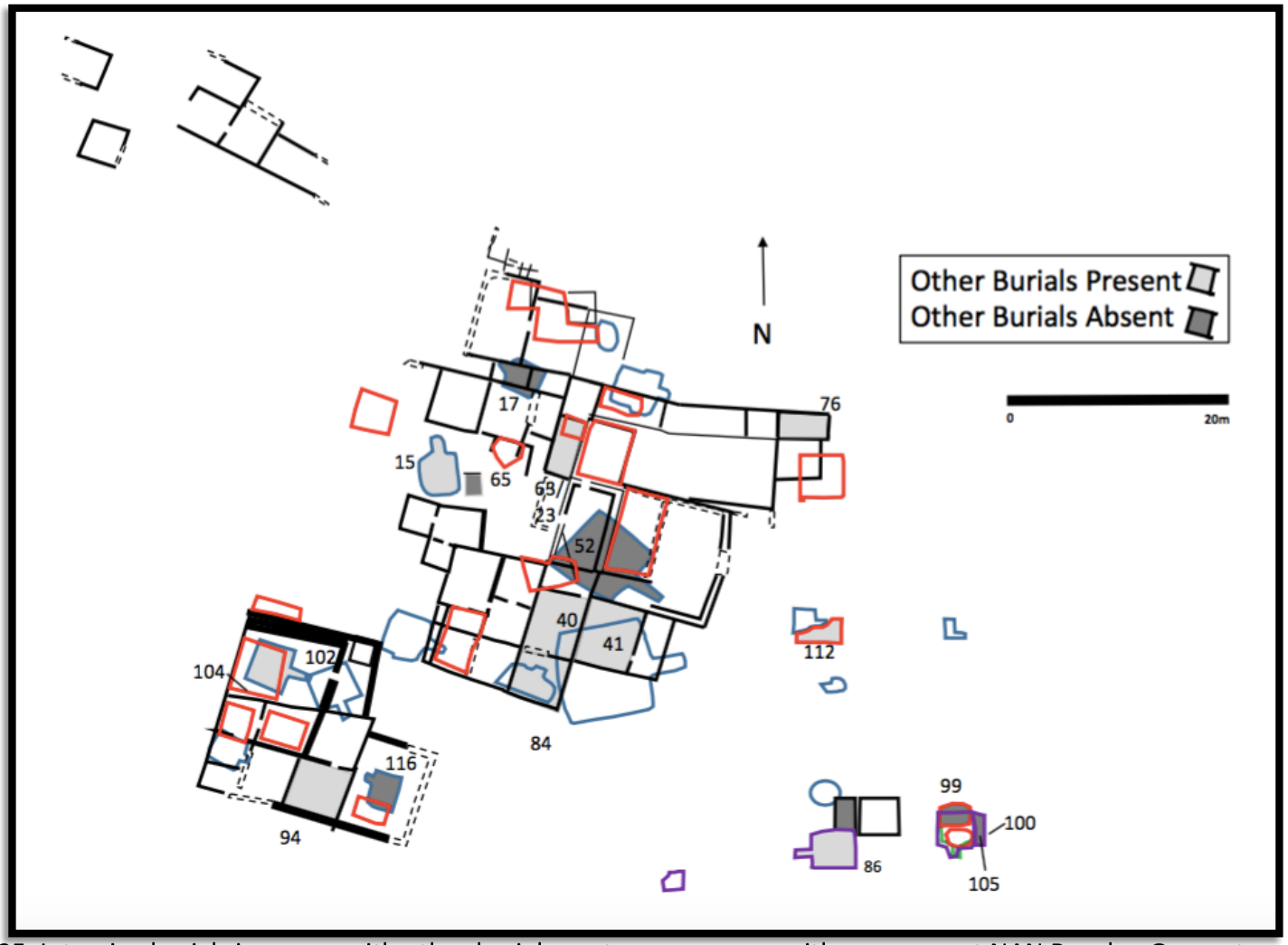

Figure 5.25. Intrusive burials in rooms with other burials contemporaneous with room use at NAN Ranch. Georgetown phase structures (A.D. 550-650) are marked in green, San Francisco (A.D. 650-750) in purple, Three Circle (A.D. 750-1000) in blue, Transitional (A.D. 900-1000) in red, and Classic (A.D. 1000-1130) in black.

Galaz. Although the chi-square is suspect, there do appear to be significant differences (χ=16.489, p=0.003; Table 5.30) among room blocks for Late Pithouse, Classic, and Postclassic intrusive burials with regards to the presence of earlier non-intrusive burials in the rooms where the intrusive burials were interred. Subsequent post hoc pair-wise tests also resulted in differences between the North and Southeast room blocks (χ=15.989, p=0.003), but not between the North and Southwest room blocks (χ=0, p=1.000), nor between the Southeast and Southwest intrusive burial assemblages (χ=0.660, p=0.439). It is unlikely that the observed differences between the North and Southeast room blocks result from the vagaries of random sampling alone, and are most likely caused by the fact that all of the intrusive burials in the North room block are interred in contexts with extant burials (Figure 5.26). Perhaps at Galaz, the resident groups were using the intrusive assemblages to continue the lineage cemetery tradition.

Table 5.30. Frequencies of Galaz Intrusive Burials Interred in Rooms Where Other Burials are Present or Absent.

Room Block	**Earlier Burials Present**	**Earlier Burials Absent**	**Total**
North	63	0	63
Southeast	3	1	4
Southwest	2	0	2
Total	68	1	69

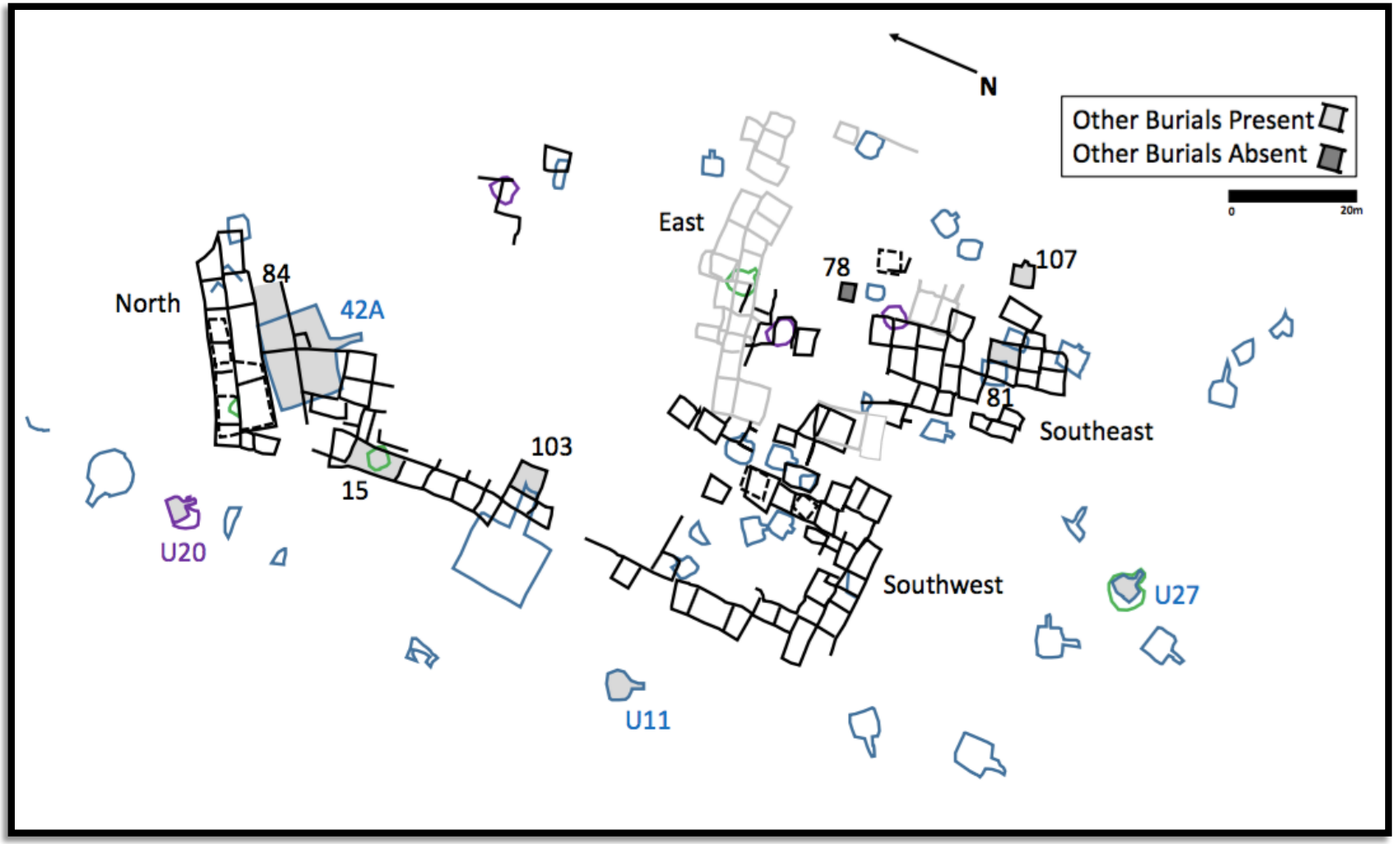

Figure 5.26. Intrusive burials in rooms with other burials contemporaneous with room use at Galaz. Georgetown phase structures (A.D. 550-650) are marked in green, San Francisco (A.D. 650-750) in purple, Three Circle (A.D. 750-1000) in blue, and Classic (A.D. 1000-1130) in black, and Postclassic (A.D. 1130-1350) in gray.

Mattocks. As Table 5.31 shows, 69.23% of intrusive burials occur within rooms that contain other contemporaneous non-intrusive burials. As such, there are again significant differences (χ=26.000, p=0.001; Table 5.31), between room blocks at the site level with and without other burials present, or those potentially used as lineage cemeteries. Post hoc pair-wise comparisons also resulted in significant differences between 100s and Southeast room blocks (χ=13.000, p=0.003), the 200s and Southeast room blocks (χ=10.000, p=0.002), and the 400s and Southeast room blocks (χ=16.000, p=0.001). As the Southeast room block does not contain any instances of intrusive burials placed in rooms with extant burials, this explains the difference between that room block and the others at the site of Mattocks.

Table 5.31. Frequencies of Mattocks Intrusive Burials Interred in Rooms Where Other Burials are Present or Absent.

Room Block	**Earlier Burials Present**	**Earlier Burials Absent**	**Total**
100s	6	0	6
200s	3	0	3
300s	0	1	1
400s	9	0	9
Southeast	0	7	7
Total	18	8	26

Thus, rooms with extant burials or intramural cemeteries (100s, 200s, 400s room blocks) are more likely to also contain later intrusions. Intrusive burials are isolated from other burials in the one excavated but isolated room lumped into the 300s room block, Unit 325 and those in 80b of the Southeast room block (Figure 5.27).

It must be restated that due to the lack of data or burial association with particular rooms for the 300s and Nesbitt's Southeastern group, this statistically significant variation may be due solely to this data absence.

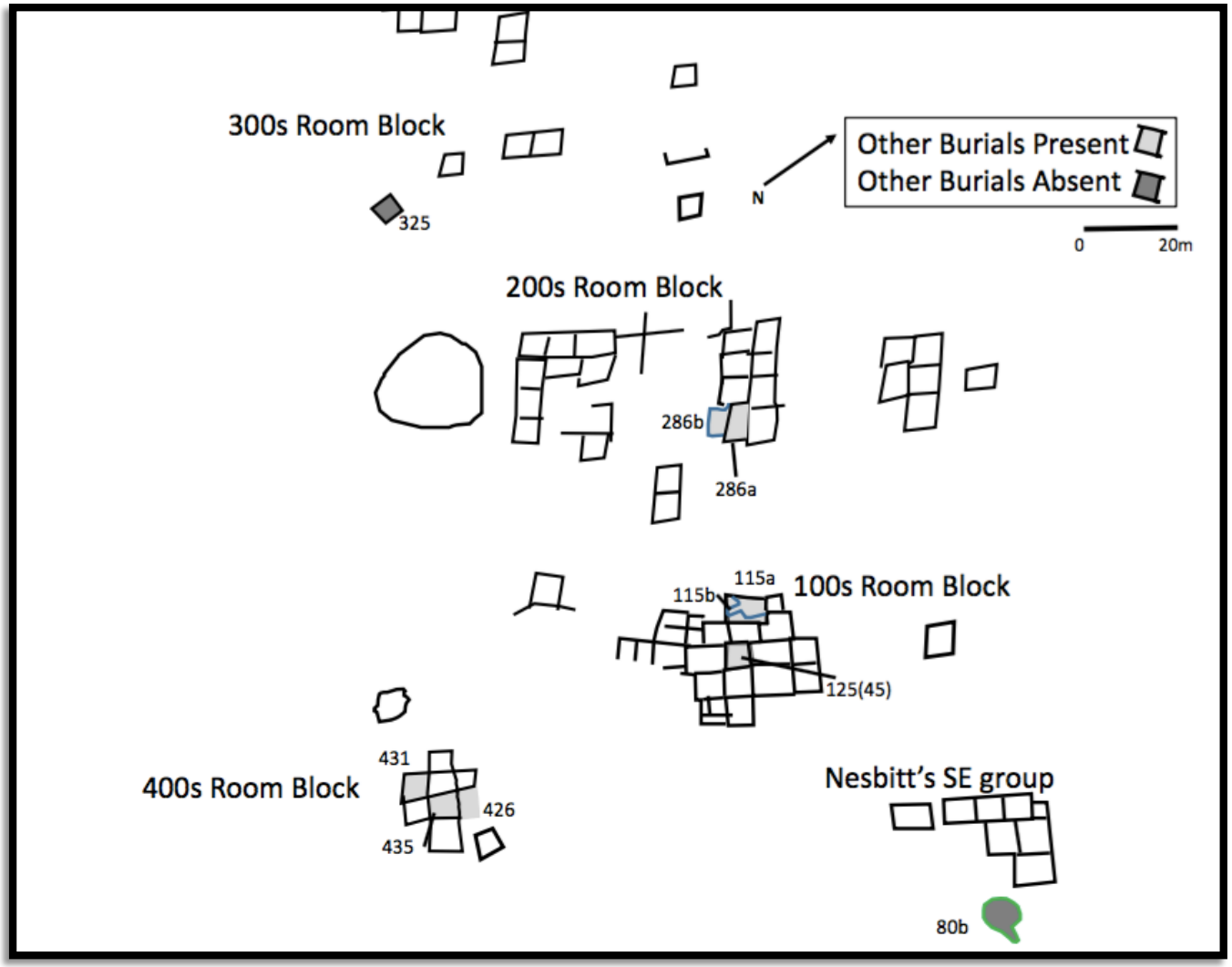

Figure 5.27. Intrusive burials in rooms with other burials contemporaneous with room use at Mattocks. Georgetown phase structures (A.D. 550-650) are marked in green, Three Circle (A.D. 750-1000) in blue, and Classic (A.D. 1000-1130) in black.

Ritual Depositions

Many scholars including McAnany and Hodder (2009:8) and Mills (2008) have argued that the act of burying something or someone can be done with the intention of hiding or concealing something, to remember and to forget. Without knowing what actors' goals were, I will discuss ritual depositions of valuable or special items such as shell, turquoise, stone pipes, ochre, stone hoes, or macaws deposited during construction or at termination of a structure, as both an activity of both forgetting and of remembering, or as remembering through forgetting (Mills 2008). Below, I discuss in more detail the location, relative timing, and any variations in the caches (Table 5.32) among room blocks through presence or absence, or differences among sites when possible.

Table 5.32. Comparison of Cache Locations for Each Room Block at the Three Sites in the Study.

Site	Room block	Room	Number of Caches	Room Block Totals
Galaz	North	20	1	4
		42A	2	
		SWM-D	1	
	Southeast	79	1	1
NAN Ranch	East	85	1	1
	South	28	1	2
		90	1	
Mattocks	Southeast	49	1	2
		43	1	

NAN Ranch. There are only three reported cases of ritual depositions or caches within room contexts at NAN Ranch. Two occur in the South room block and one in the East room block (Figure 5.28). The hearth in Room 28 of the South room block contains a broken *Glycymeris* shell bracelet, and Room 85 also of the South room block contains a corrugated mug beneath the adobe floor. Room 90 of the East room block contains a sherd-lined pit associated with a shell bracelet fragment, two turquoise pendants, and a zoomorphic pendant (Shafer 2003:64). The Southeast room block is the only one to not have a reported cache.

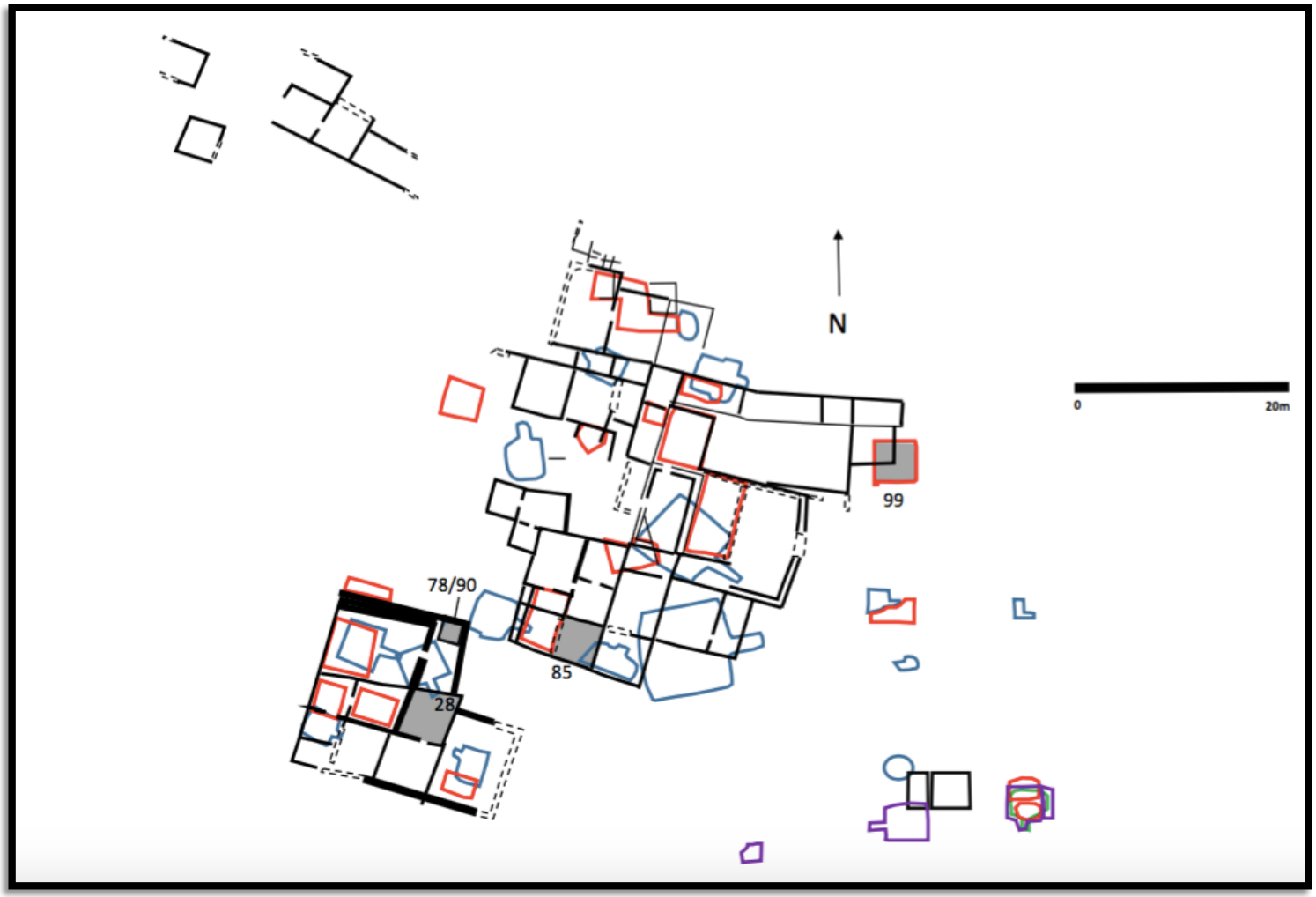

Figure 5.28. Map of cache locations at NAN Ranch. Caches are shaded. Georgetown phase structures (A.D. 550-650) are marked in green, San Francisco (A.D. 650-750) in purple, Three Circle (A.D. 750-1000) in blue, Transitional (A.D. 900-1000) in red, and Classic (A.D. 1000-1130) in black.

*Galaz***.** More than any other site in this study, Galaz contains at least six artifact caches, one dating to the San Francisco phase and the rest to the Classic period. Four are in the North room block and two are in the same room within the Southeast room block. Those in the North room block are in a San Francisco phase Pithouse 20, two in Three Circle Great Kiva 42A, and one in Classic room SWM-D. The two from the Southeast room block both come from Classic Room 79.

An adobe-covered cache is described for Pithouse 20 as containing two pieces of chrysocolla, four bone beads, iron ochre, and a projectile point fragment (Anyon and LeBlanc 1984:61). One of two caches in Great Kiva 42A consists of inverted stone bowls and pipes placed on the floor before the structure was decommissioned and burned (Anyon and LeBlanc 1984:124). The other was a plastered subfloor assemblage consisting of a carved stone effigy, green painted tuff frog, crystals, a *Glycymeris* shell bracelet, a vessel, turquoise, and shell and stone beads and pendants located in a corner of the structure (Anyon and LeBlanc 1984:124). There is a cache buried in Room SWM-D of the North room block adjacent to Rooms 84 and 85. This room had the most Classic cremations and caches consisting of 80 obsidian projectile points, one chalcedony point, 8-10 sandstone pipes, two copper bells, and two bowls containing turquoise and shell beads and pendants (Anyon and LeBlanc 1984:139, 182). In the Southeast room block, one cache consisted of 24 stone hoes and the other cache of painted pipes were uncovered below the floor of Room 79 (Anyon and LeBlanc 1984:81, 280), and it is the only one not within the confines of the North residential group (Figure 5.29, Table 5.32).

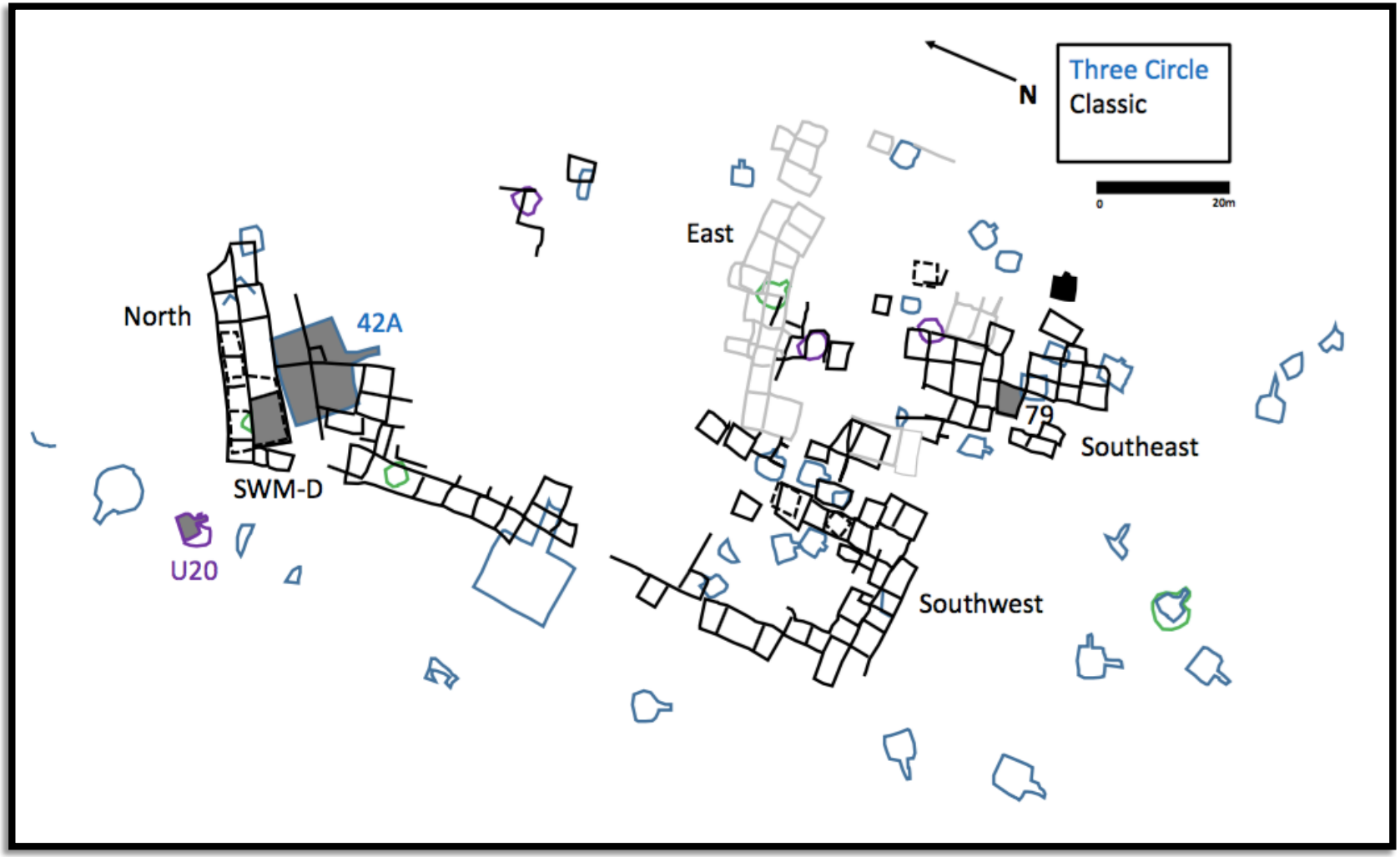

Figure 5.29. Map of cache locations at Galaz. Caches are shaded. Georgetown phase structures (A.D. 550-650) are marked in green, San Francisco (A.D. 650-750) in purple, Three Circle (A.D. 750-1000) in blue, and Classic (A.D. 1000-1130) in black, and Postclassic (A.D. 1130-1350) in gray.

Mattocks. The Mattocks site has two recorded caches. In his 1931 report, Nesbitt notes the discovery of two large caches of stone hoes in Rooms 49 and 43 in his Southeast room block (Table 5.32). The cache of 47 stone hoes in Room 49 was included in burial 151 (Nesbitt 1931:82). An additional 25 stone hoes were recovered from Room 43 (Nesbitt 1931:21-23, 80-82).

Gilman and LeBlanc (2017:352) argue that stone hoe caches could have been in anticipation of future, perhaps seasonal, use. They support this notion with the documentation that hoes found elsewhere such as at NAN Ranch do show signs of thrusting use consistent with digging, but could also indicate ritual deposition of used items (Dockall 1991:252-253).

Cutting: Burial Removals and Disturbances

Removing and disturbing older inhumations is a counterpart to the processes of remembering considered above in the discussion of intrusive burials. Potentially, many intramural burials are removed or disturbed to make space for new burials as an expected outcome of the long use of a room for burial deposits. According to McAnany and Hodder (2009:8), burials were removed and relocated to new contexts, and we can infer this to be an action of either avoidance and forgetting or of remembering. The latter might be the case if removed burials are then interred intrusively into another context, or kept alongside the living for a time. Unless there are missing elements of an intrusive individual that are found in a burial removal pit, it is often difficult to ascertain where removed individuals ended up. Ancient removals do suggest that ancestors and the deceased continue to be used for various agendas, in accordance with social memory practices.

We can conceptualize disturbances by later burials in one of two ways. The first is that the frequency of disturbances and disarticulations by burials or other construction and excavation activities is a natural outcome but may suggest a disregard for the earlier burials. Alternatively, we can infer the frequency of later disruptions as an indicator of the importance of continually demonstrating one's links with a group, place, or temporality. In this research, I use the later conceptualization, given the other evidence for the importance of social memory practices at the sites. I only discuss disturbances of a burial by placement of another burial and not of later construction activities as these latter are f ubiquitous across sites.

Because of the difficulty dating ancient burial removals and disturbances, I discuss them relative to other events such as the date of the burial inferred from the earliest date of the room or floor from which the burial was interred. For example, if a pit with all the earmarks of an intramural burial pit such as dimension and present artifacts were found within Classic room contexts, then most likely the burial was contemporaneous to that period and the activity of removal could have only happened during or after that same period.

NAN Ranch. Shafer (2003:146) noted that disturbed and disarticulated burials were common at NAN Ranch, especially in areas used over many generations, and that some instances like Room 29 where infant burials were destroyed suggest a disregard for earlier burials. On the other hand, some disturbed burials were treated with great care. Take for instance Burial 89 in Room 23A. A later Classic burial (Burial 88) cut 89 virtually in half, but the disarticulated remains of 89 were placed caringly at the feet of 88 (Shafer 2003:146). No significant differences occur between the locations of prehistoric disturbances in that all room blocks contain at least one Transitional/Classic or Classic period burial disturbance (Table 5.33). Nearly all were caused by cross-cutting burials by later interments.

Table 5.33. Locations of Prehistoric Disturbances to Burials by Room Block at NAN Ranch.

Room Block	Number of Removed Burials	Number of Transitional/ Classic Disturbed Burials	Number of Classic Disturbed Burials	Totals
East	1	0	2	3
East Plaza	0	2	0	2
South	1	3	1	5
Southeast	0	1	0	1
Totals	2	6	3	11

Prehistoric removals are far less common at NAN Ranch. Only one confirmed case of removal is at NAN Ranch, and it comes from Room 79 (Figure 5.30). Only the feet remained in a removal that took place before the laying of the second floor either in the Late Transitional or Early Classic period (Shafer 1987:37-38, 54). This burial could have been relocated as a statement of forgetting or avoiding. Equally it could be evidence of remembering through the retrieval and possible later inclusion as one of the Classic intramural burials in the South room block. A second possible removal takes place in Room 14a of the East room block, and contains a pit with similar diameter and size to those of a Classic burial pit, along with a smashed early Transitional Black-on-white bowl (Shafer 2003:32).

This would suggest that both the South and the East room contain removed burials for either avoidance, or relocation. As the removal in the South room block came from a Transitional structure 79b, and Room 14 is a Three Circle phase pithouse, it is possible that these burials were relocated into other intramural contexts sometime during the Classic period. Small sample sizes of the reported cases of both

disturbances and prehistoric removals (Table 5.42) and inability to tightly date the removal or disturbance events prevents any statistical significance testing.

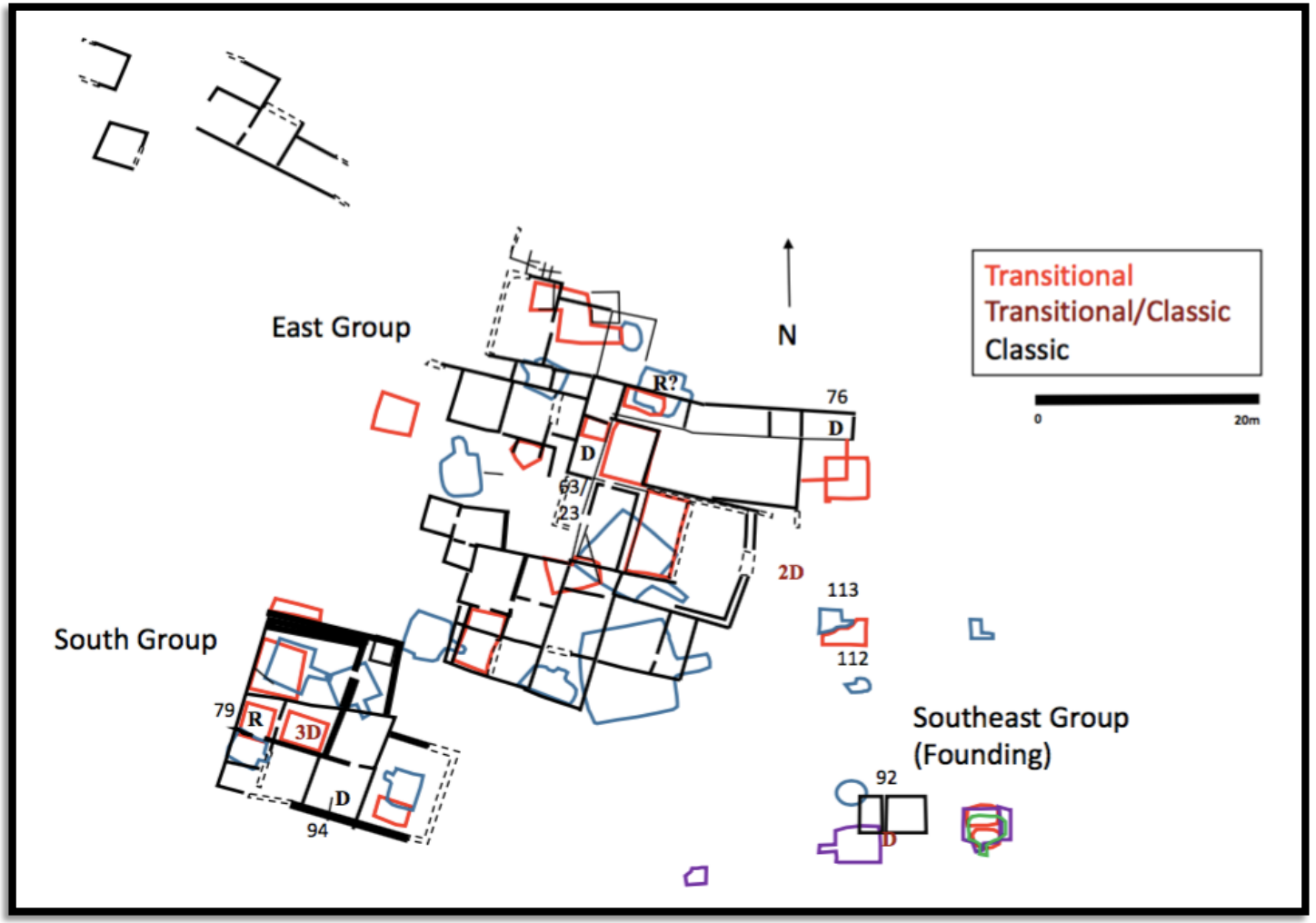

Figure 5.30. Map of prehistorically disturbed (D) and removed (R) burials at NAN Ranch. Georgetown phase structures (A.D. 550-650) are marked in green, San Francisco (A.D. 650-750) in purple, Three Circle (A.D. 750-1000) in blue, Transitional (A.D. 900-1000) in red, and Classic (A.D. 1000-1130) in black.

Galaz. Because early excavators did not record all burial data that we do today, I do not have the descriptive level for the Galaz site to contribute much to this section in ways comparable to the other two sites. For example, Anyon and LeBlanc (1984:180) note some burials were disturbed but do not specify whether this disturbance took place prehistorically or in the more recent past. Each room block contains evidence of burial or crania removal in either the Late Pithouse or Classic periods (Table 5.34). Only two burials in Room 87 of the Southeast group were explicitly recorded as disturbed by later burials (Anyon and LeBlanc 1984:444).

There are seven possible instances of burial removals at Galaz (Table 5.34). Five "empty burial pits" occur within Pithouse 11 (Anyon and LeBlanc 1984:88), and two within Pithouse 26, both of which are located in the Southeast room block. Pits 16 and 19 in Pithouse 26 had the earmark size and shape of Mimbres subfloor burial pits but were not found to have contained any human bone (Anyon and LeBlanc 1984:64).

Table 5.34. Frequencies of Burial Removals, Missing Crania, or Crania Only Burials at the Room Blocks of Galaz by Date.

Room Block	**Number of Late Pithouse Removals**	**Number of Classic Removals**	**Number of Late Pithouse missing crania or crania only burials**	**Number of Classic missing crania or crania only burials**	**Totals**
North	0	0	2	0	2
Southeast	0	0	2	2	4
Southwest	7	0	0	0	7
Totals	7	0	2	2	13

Related to the process of removals or relocations are the presence of both crania-less burials and burials of isolated crania. While some of these instances of crania-less burials can occur naturally due to deterioration of bones from water, especially for small infant and child crania, some may suggest that living relatives removed the crania prior to or after the burial event took place (Anyon and LeBlanc 1984:181). Anyon and LeBlanc (1984:182) describe five occurrences of plausible missing crania or crania only burials, one that dates to the Classic, one to the Postclassic, and three that are not dateable. Elemental removal, especially of the crania, is a common practice in early Pre-Pottery Neolithic B groups (Hodder 2008:27; Kuijt 2001:3).

Curiously, two of the four instances of missing crania are the same two burials (15-175 and 15-176) interred below the floor during the Late Pithouse use of Great Kiva 42A in the North room block (Anyon and LeBlanc 1984:122). The other missing crania were recorded in Rooms 81 and 87, and two crania-only burials were noted in Room 81 of the Southeast room block (Anyon and LeBlanc 1984:444). Thus, both the Southeast and the North room block inhabitants practiced some form of crania removal or reburial, and inhabitants of all room blocks practiced burial or elemental removal of some kind (Figure 5.31).

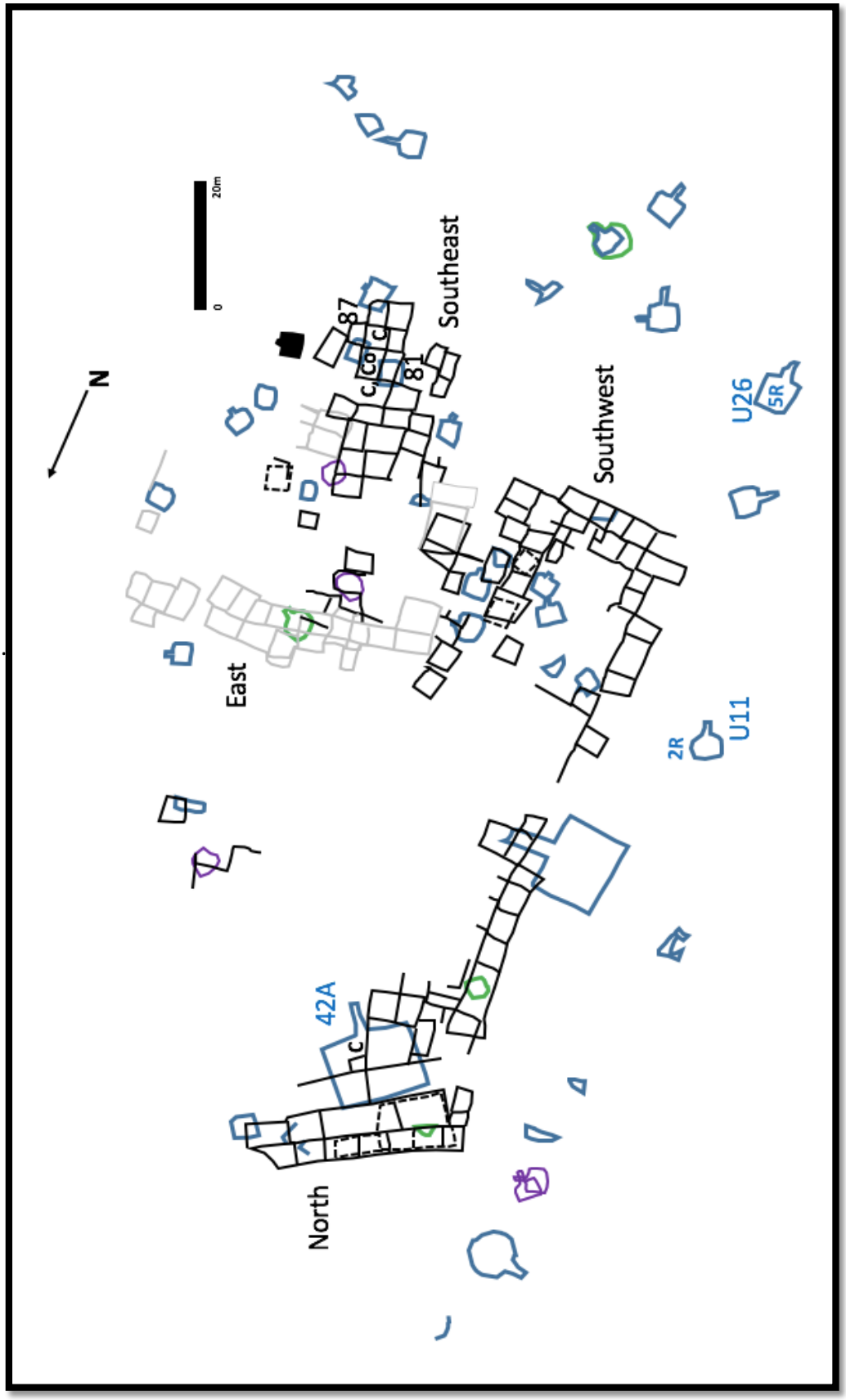

Figure 5.31. Map of prehistorically removed (R), missing crania (C)/crania only (CO) burials at Galaz.

Mattocks. Each of the main room blocks excavated by the Mimbres Foundation, (100s, 200s, and 400s), contained at least one occurrence of a burial that was removed or heavily disturbed by later burials during the occupation of the site. These are in areas without much potting activity (Figure 5.32). In Room 433, for example, ancient inhabitants removed five burials from pit 6S-6P before flesh decomposed and the bones became disarticulated because there were no human remains found in the pits (Gilman and LeBlanc 2017: 189). Those pits were similar in size and shape to typical Classic Mimbres intramural burials, and contain other shallower pits around the possible removal pits may have been exploratory digging to locate the bodies by prehistoric peoples, but there is no evidence concerning why this removal occurred (Gilman and LeBlanc 2017: 221).

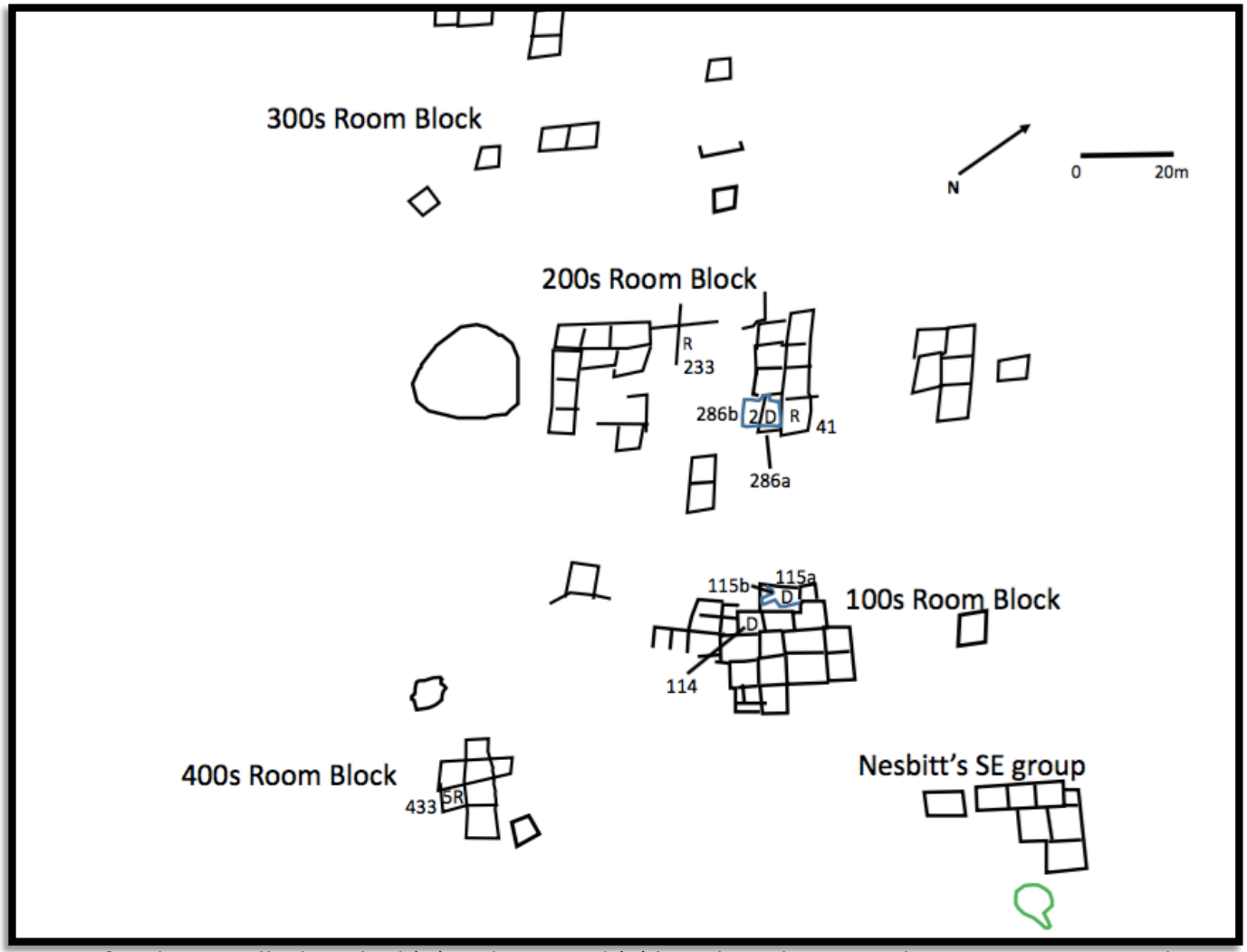

Figure 5.32. Map of prehistorically disturbed (D) and removed (R) burials at the Mattocks site. Georgetown phase structures (A.D. 550-650) are marked in green, Three Circle (A.D. 750-1000) in blue, and Classic (A.D. 1000-1130) in black.

Some groups may have been more active participants in removing or disturbing the dead and ancestors than others (Table 5.35). For instance, I found only two instances of removals, one in Room 233 and the other in Room 41 of the 200s room block. Interestingly, there are as many as five cases in a single room, Room 433, of the 400s room block. Gilman and LeBlanc (2017:270) speculate that this increase in removal may have precipitated or have been precipitated by the un-plastered burial pits in rooms still being used, as well as the fire that destroyed these rooms. It may be that, for the household that built and resided within the 400s suite of rooms, removing their recently deceased to new areas, to keep them closer to living relatives, was a highly meaningful and important task conducted many times during the Classic period.

Table 5.35. Locations of Prehistoric Disturbances to Early Burials and Removals by Room Block at Mattocks.

Room Block	**Number of Classic Burials Removed**	**Number of Transitional/ Classic Disturbed Burials**	**Number of Classic Disturbed Burials**	**Totals**
100s	0	0	2	2
200s	2	2	0	4
300s	0	0	0	0
400s	5	0	0	5
Southeast	0	0	0	0
Totals	7	2	2	11

Summaries and Conclusions

As observed above, the presence of intrusive burials, intrusive burial characteristics, caches, and prehistoric burial removals and disturbances contribute to

rich and complex material narratives inscribed on the landscape by Mimbres actors. Through these various activities and processes of adding, cutting, and adding and cutting, I examined how social and corporate group memory is created, re-created, reimagined, or forgotten and avoided by various intra-site groups. Different frequencies of these social memory burial practices suggest intra-site variations in how, when, and with different strengths and intimacies groups had with their past and past places. The intra-site differences are summarized below for each site. Unfortunately, because of the small sample sizes that statistical significance of most intra-site differences is suspect at best.

Site and Room Block Summaries

NAN Ranch

I found no statistically significant differences between room blocks with regards to differences in lengths of time elapsed after occupation and before intrusive burial events. To quickly summarize, NAN Ranch room blocks do not differ statistically from each other with regards to time elapsed after structure occupation and before intrusive burials events. Both the East and South room blocks contain intrusive burials that date no more than two architectural phases after the occupation of a structure. The Southeast room block does contain the largest architectural phase range of three for Classic burials placed in San Francisco age contexts. Thus, while not statistically significant, the founding Southeast group may have had slightly better access to the distant past.

At NAN Ranch, most intrusive burials are in the fill or near the floor, although those in the South are more often near or below the floor than those intrusive burials in the East room block. Each room block contains at least one burial below the floor. The mere presence of a later burial existing in the oldest structure may carry more weight than being deeper, and might account for the shallowness of many of the intrusive burials.

The East, South and Southeast room blocks at NAN Ranch do not vary significantly in intrusive burial assemblages when the age and sex of the individual interred. Both adults and children are represented in intrusive burials at every room block, and there are both sexes represented in the fill of Great Kiva 52. As many members of different ages and sexes were interred intrusively, this suggests that lineage or corporate group affinity rather than achieved status governed burials.

Likewise, there are no statistical differences in the room function of intrusive burials. Most intrusive burials occur in domestic or habitational contexts. Habitation rooms would be ideal locations through which to reference one's lineage history of inhabitations. The East room block contains four burials in Great Kiva 52, and the Southeast contains a burial in the same room as that of a possible shaman.

Chi-square testing resulted in no statistically significant difference between room blocks concerning the relative presence or absence of associated ceramic vessels with intrusive burials at NAN Ranch. Interestingly, 82.4% of the NAN Ranch intrusive burials are without any associated vessels. Perhaps this lack of ceramics indicates greater effort for these burials to blend into their earlier contexts and temporalities.

Concerning the frequency with which individuals were placed in superimposed contexts, there are no statistically significant differences between room blocks. Most intrusive burials were placed in superimposed rooms. Slight differences are observed between the Southeast and other room blocks at NAN Ranch, in that all of the intrusive burials for the founding Southeast room block are in superimposed or superimposing structures.

Again, room blocks did not differ significantly in terms of the frequency that intrusive burials accompanied older extant burials in the final intruded context. The South room block had the most intrusive burials in contexts with other burials (75%). Only a handful of rooms with intrusive burials lacked other rooms, one of which was Great Kiva 52.

Only three caches were recorded for NAN Ranch, two occur in the South room block and one in the East room block. The Southeast room blocks is the only corporate group to not have ritually deposited a large cache of special items.

No significant differences occur between NAN room blocks concerning the locations of prehistoric disturbances. All room blocks contain at least one Transitional/Classic or Classic period burial disturbance. Nearly all were caused by cross-cutting burials by later interments. Only two possible burials removals were noted for this site, one in the South room block and one in the East room block. This would suggest that both the South and the East room contain removed burials for either avoidance, or relocation.

As Table 5.36 demonstrates, many burial activities associated with social memory performance occurred in the confines of the East room block. While not the group associated with the earliest structure on the site, people in this room block practiced every memory performance activity except removals with greater frequency than the other two room blocks during both the Classic and Transitional periods. This room block frequently practiced intrusive burials and prehistoric disturbances. However, the East room block intrusive burials are in more recent rooms and not the San Francisco age pithouses like the intrusive burials in the Southeast room block. Perhaps the inhabitants of the Southeast room block had access to earlier temporalities than those in East room block during the Classic period.

Table 5.36. NAN Ranch Room Block Comparisons of Frequencies of Adding and Cutting Behaviors.

NAN Ranch	**Intrusive Burials**	**Caches**	**Burial Disturbances**	**Burial Removals**	**Totals**
East	19	1	4	0	24
South	4	2	4	1	11
Southeast	5	0	1	0	6
Totals	28	3	9	1	41

Galaz

There are significant differences between the Galaz room block with regards to the timings of burial events after occupation. All of the burials in the Southeast and Southwest room blocks date to either the Classic or Late Pithouse/Classic periods and are interred in those same aged contexts with little elapsed time between. Even

though most of the intrusive burials interred by inhabitants of the North room block date to the Classic or Postclassic period, they are in structures at least one architectural phase older suggesting intergenerational differences between the burials and their contexts.

The depth that individuals were interred did not vary significantly between room blocks. Most were in the fill, although one burial in Great Kiva 42A was below the original floor of the structure along with two burials contemporaneous with its Late Pithouse use. Both the North and Southeast room block intrusive burial are reported at varying levels, while those burials in the Southwest room block only occur in the fill of older abandoned structures. The Postclassic intrusive internments in the North room block are located near the floor, perhaps as a result of less internal room fill caused the rooms being more recently abandoned.

No significant differences occurred among room block intrusive burials concerning interred individual's age or sex at Galaz. The North room block contained all age groups from infant to old adult. The Southeast room block contained at least one child and adult intrusive burial, and the Southwest contained one adult and one indeterminately aged burial. While most individuals could not be confidently sexed, there are no significant differences between room block concerning the sex of intrusive interments. Both males and females were present in Great Kiva 42A and Room 84 in the North room block. Males and females also make up the Postclassic intrusive assemblage.

Each room block had some form of burial removal that took place within its confines. Two crania removal and two crania only burials were recorded for the North and Southeast room block respectively. Interestingly, the other two burials missing crania are the two subfloor burials interred during the use of Great Kiva 42A in the North room block. No significant differences exist when the presence of other burials is examined. Most were in contexts previously used for intramural interments.

There are significant differences between Galaz room blocks with regards to the function of rooms with later intrusive burials. These differences occur between the North and Southeast and Southwest room blocks, but not between the Southeast and Southwest room blocks. The presence of all of the intrusive burials in the North room block in ceremonial or communal rooms, and the closer association of intrusive burials in domestic or habutational contexts for the other two room blocks accounts for the statistical differences.

Observable differences do occur between Galaz room blocks concerning the presence or absence of vessels accompanying intrusive burials. Post-hoc comparisons demonstrated variability between the intrusive assemblages of the North and Southeast room blocks. The differences suggest that the intrusive burials of the North room block are more often associated with accompanying ceramic vessels than the Southeast room block.

Chi-square tests resulted in significant differences between room blocks at Galaz concerning the presence of intrusive burial in superimposed contexts or not. There are differences between the North and Southeast and Southwest room blocks.

All of the intrusive burials in the North room block occur in superimposed contexts, while only one from the Southwest and one burial from the Southeast do.

Significant differences are noted for Galaz room blocks with regards to the presence of earlier non-intrusive burials in the rooms where the intrusive burials were interred. Post hoc tests point to variation between the North and Southeast room blocks. It is unlikely that the observed differences between the North and Southeast room blocks result from the vagaries of random sampling alone, and are most likely caused by the fact that all of the intrusive burials in the North room block are interred in contexts with extant burials.

Galaz contains the highest frequency of ritual depositions than any of the three sites in the present study. Four are in the North room block and two are in the same room within the Southeast room block. Those caches in the founding North room block most likely occurred there as that room block superimposed both of the Three Circle Great Kivas.

With seven total instances of burial removal or later disturbance, there are no observable differences between room blocks at Galaz. Each room block contains evidence of burial or crania removal, or cranial relocation in either the Late Pithouse or Classic periods. Both of the extant burials under the floor of Great Kiva 42A, interred before later intrusive burials lacked crania.

The North room block appears to be very different than the other two room blocks. The North room block contains nearly all (91.30%) of the intrusive burials that were interred in both the Classic and Postclassic periods, and only one from the San

Francisco or Three Circle phase. Most of these (88.41%) were placed in ceremonial contexts such as within the fill of Great Kiva 42A or near the floor of corporate kiva 15, and this pattern does appear to be robust and significant according to a chi-square test. The North room block consistently contained the longest gap (one architectural phase) between structure abandonment and intrusive burial date. Many of the other room block burials were within Classic contexts with little time passing between the end of occupation of a Classic structure and the placement of a burial intrusively into its contexts. On the other hand, the North may hold the earliest intrusive burial into San Francisco contexts as well as the only Postclassic burials that postdate most of the site occupation. The same North room block is the locale for five of the six known floor caches. This room block also varies significantly from the others concerning intrusive burials in superimposed contexts. All of the burials in this room block occur in areas of superposition as opposed to 33% and 50% ratios for the Southeast and Southwest room blocks respectively. In nearly all instances, the North room block contains the most intrusive burials than any other room block by far (Table 5.37). The North room block also contains the most intrusive burials in superimposed contexts, and intrusive burials in ceremonial rooms.

Table 5.37. Galaz Room Block Comparisons of Frequencies of Adding and Cutting Behaviors.

Galaz	Intrusive Burials	Caches	Prehistoric Burial Removals	Missing Crania Burials	Crania Only Burials	Totals
North	63	4	0	2	0	69
Southeast	5	1	0	2	2	10
Southwest	1	0	7	0	0	8
Totals	69	5	7	4	2	87

Mattocks

To review, there are statistically significant differences in architectural phases gaps between room blocks for all dated Mattocks site intrusive burials. Most of this variation occurred between the Southeast and other room blocks. The Classic burials in the Georgetown phase pithouse, a gap of three architectural phases, most likely contributed to the differences between the Southeast and the 100s, 200s, and 400s room blocks.

When compared at the site level, the Mattocks intrusive burial assemblage does not differ significantly in depths between room blocks. That said, the 100s and Nesbitt's Southeastern group are more often associated with burials in the fill or near the floor. The 400s, 300s, and two of the 200s intrusive burials were most often un-plastered or partially plastered burials that most likely post-date the use of the structure.

Like at Galaz and NAN Ranch, there are no significant differences between room blocks at Mattocks. While the 200s and 300s room blocks contain only adults or old adults, children and adults are present in the intrusive assemblages of the 100s,

400s, and Nesbitt's Southeastern group. Overall, there are no statistical differences in the sexes of intrusive individuals at Mattocks, although many could not be sexed. Men are present in each of the room blocks. Women are present in the 100s, 200s, and Nesbitt's Southeastern residential group.

There are statistically significant differences concerning room function of intrusive burial contexts between room blocks at Mattocks. Mostly, the differences lie between the 200s room block, containing burials in presumed communal storage areas, and the other room blocks with intrusive burials in habitation rooms. However, the majority of the intrusive burials at the Mattocks site occur in former domestic spaces, and are congruent with groups performing a social memory maintenance with those earlier structures.

I detected no significant differences are observed between Mattocks room blocks concerning vessel presence. Unlike NAN Ranch, most intrusive burials at Mattocks contained vessels. Only the 100s, 300s, and 400s room blocks contain intrusive individuals without associated ceramics.

I found observable differences between the Mattocks room blocks concerning whether intrusive burials were placed in superimposed contexts or not. Overall most intrusive burials were not placed in rooms that were superimposed. The 100s and 200s room blocks differ significantly from the remaining room blocks as the only instances of superposition. The earliest structure is part of Southeast room block and was not superimposed.

Statistically significant differences do occur between Mattocks room blocks at the site level concerning intrusive burials in areas with and without other burials present. The Southeast assemblage diverges from the intrusive burials of the 100s, 200s, and 400s room block. The Southeast is the only room block to not contain other extant burials in places chosen to perform social memory through intrusive burial internments.

The inhabitants of the 100s, 200s, and 400s all disturbed earlier burials with later interments, and there is no real difference among them in that regard. I found only two instances of burial removal from the 400s and 200s room block respectively

While the intra-site comparison is mainly for the Classic period at the Mattocks site, it seems that the Southeast room block and the 400s were the two most frequent performers of social memory through burials, caches, and removals (Table 5.38). The second highest count of intrusive burials came from one structure in the Southeast group and is the oldest structure. The 400s contains many un-plastered and prehistorically removed burials. Thus, while the 400s has a higher total of memory associated activities, the intimacy and knowledge narrative of the past is better referenced and demonstrated at the Southeast group locale.

Table 5.38. Mattocks Room Block Comparisons of Frequencies of Adding and Cutting Behaviors.

Mattocks	**Intrusive Burials**	**Caches**	**Burial Disturbances**	**Burial Removals**	**Totals**
100s	6	0	2	0	8
200s	3	0	2	2	7
300s	1	0	0	0	1
400s	9	0	0	5	14
Southeast	7	2	0	0	9
Totals	26	2	4	7	39

CHAPTER 6
EVIDENCE FOR MIMBRES SOCIAL MEMORY IN ARCHITECTURAL SUPERPOSITION

As the previous chapter illuminated the ways that intrusive burials can be analyzed and viewed along the lines of memory and continuity with the past, I will now turn to the architectural assemblage in an attempt to do much of the same. The superposition of structures over earlier structures or burials compliments the burial data and provides further support for inferences regarding social memory in the Mimbres region, at least in the three sites investigated. As Hodder and McAnany (2009: 11) state, the decision to build over a previous structure requires more steps to get a level surface than avoidance of earlier structures. For example, the careful placement of the Classic room over the eastern part of the pithouse is evidence that the builders of that room knew the location of the pithouse and thus placed the north, east, and south Classic room walls beyond the extant pithouse walls to achieve better stability. Only the west wall is described as superimposing over the pithouse fill and making contact with that fill (Gilman and LeBlanc 2017:260).

One can further investigate intentionality and the strength of reference or intimacy with the past by examining how the structures are superimposed. Is the overlying structure merely touching one wall or corner of the earlier structure or does it bisect or encompass three to four of its original walls? Surely knowing the original extent of a structure and aligning a more recent edifice in relation to that structure suggests greater knowledge concerning that space and the group that once resided there.

This chapter comprised of analysis results, is guided by the principle that superposition was a decision(s) that involved more steps to level a previously used, occupied, and altered space. Thus, superposition is a meaningful practice not to be reduced to an outcome of the practicality in building upon a previously inhabited place. Thus, place is culturally meaningful and great pains and surface preparations were sometimes undertaken to ensure that. Do we have evidence for multiple intra-site groups attempting to substantiate, authenticate assert or invent antecedence to better their current situation?

I present the following observations by examining the spatial and temporal patterns of architectural superposition and remodeling to show how households made the transition to above-ground dwellings in situ where they had been living, and if they maintained contact with their ancestral places. This chapter is organized by the processes involving adding, cutting or both. I discuss each process at each site, starting with NAN Ranch, then Galaz, and finally Mattocks. For each site, I discuss temporal patterns to illuminate when superposition is most frequent for each room block and site, what are the relative dates for the structures involved, and how far back in time are superimposed structures attempting to reference connections to the past. Next, I examine where intra-site/corporate group differences occur and other spatial patterns concerning frequencies, types and strengths of the superpositions, and primary context/function of the spaces (mundane or sacred).

Additionally, I examine the presence and frequency of activities similar to superposition to flesh out other more nuanced ways groups are continually using, re-

using or changing rooms and surfaces to meet the needs of the present. These include pre-room burials later superimposed, multiple flooring episodes, remodeling, and midden creation or abandoned rooms used as trash dump. These lines of evidence and any related temporal or spatial patterns are brought together to discuss the ways groups living at these three sites inscribed on the landscape about their continuity and ties to earlier places, ancestors or activities.

This detailed discussion for each site allows for an investigation of how social memory is played out through superpositioning between a variety of residential or corporate groups attempting to demonstrate ties to places or more notably antecedence or primacy. These memory performances carry with them implications for land tenure and other social and ritual rights, privileges, power and prestige. The truth regarding which group occupied the area first can be conceptualized as secondary to the truth of which group argues most convincingly through the quantity, quality, or depth of their demonstrations of ties to past and of places in Basso's (1996) sense of the word. To better evaluate the notion that temporal persistence is a key aspect of the social memory making process (Joyce 2001:13, Kuijt et al. 2011), I will examine through a lens of continuity and discontinuity, when these practices were first observed, whether all groups inhabiting a site performed them, where and when changes in frequency of the practice occur, and if certain places or occupations remain in use and endure through memory performances longer than others. Thus, qualitative and quantitative measures help elucidate the intertwined processes of remembering and forgetting for groups residing at these sites. Lineage narratives

reconstructed from the examined behavior frequencies and timings are summarized at the end of this chapter and in the following discussion chapter.

Adding and Creating Sequences

As discussed below, adding structures and features above earlier ones leads to sequences of events in the same created space with physical links bridging generations. Activities and the frequencies that these activities are practiced at different rates and times by different groups, lead to unique palimpsests of occupation on the landscape. By examining the presence architectural superposition, pre-room burials later superimposed, multiple flooring episodes, remodeling, and midden creation we can comprehensively recreate and examine these distinct inscriptive performances of remembering and forgetting.

Architectural Superposition

One of the interesting aspects of human occupation in the Mimbres region is that most, if not all, large Classic period sites in the Mimbres Valley superimpose earlier pithouses (Anyon 1981:212; Gilman and LeBlanc 2017:89). Architectural super positioning can be the mechanism through which a physical link between generations and places of the past are formed, maintained and recreated (Hodder and Pels 2010; Roth and Baustian 2015). As Roth and Baustin (2015:454) note, this practice can "serve as a stabilizing factor within a community by creating shared meanings via a mutual understanding of the past." By practicing intergenerational construction in this manner, with a concern for a continuity in built space, groups, in a sense, build house or structure genealogical histories over time (McAnany and Hodder 2009:8). I

investigate the presence of absence of architectural superpositioning for each room block to help quantify overall continuity in residential space. Clear superpositioning of buildings on top of buildings with fill in between structures is a good measure to examine the social memory practices of residential lineage groups. Each site is examined for differences in the frequencies of superimposed structures, the strengths of those associations, and for the elapsed time between the occupations of each structures involved in architectural stacking.

NAN Ranch. The site of NAN Ranch has the highest frequency of superimposed structures over the centuries of site occupation among the sites investigated. Part of this relatively high number is inflated by the presence of the documented Transitional period (A.D. 900-1000). This architectural phase of sunken floors, defined by transitional architecture between semi-subterranean pithouses and above-ground pueblos, has been observed at other sites outside of the Gila region of Mimbres cultural interaction and expression (Lekson 1988; Sedig 2015; Shafer 2003).

The practice of architectural superpositioning began with the placing of a San Francisco phase pithouse in the same pit and thereby encompassing the early Georgetown structure. After another Late San Francisco phase structure was built above, there was a discontinuity during the Three Circle phase, where no structures were constructed over earlier pithouses. As seen in Figure 6.1, the practice picks up during the Transitional period and many structures are erected over San Francisco but mainly Three Circle phase structures. This frequency continues into the Classic with many Classic rooms superimposed over Transitional and other Early Classic rooms.

Table 6.1. Superimposed Structures and the Length of Time between Occupations at NAN Ranch.

Room Block	Encompassing Super-position	Bisecting Super-position	Touching Super-position	Pre-Classic Not Superimposed	Total Superposition Instances
East	12	28	1	4	41
South	7	4	2	0	13
Southeast	1	4	3	1	8
Totals	20	36	6	5	62

There are some differences when we compare the frequency, type of superposition (encompassing, bisecting, or touching), and the relative age of the structures involved between the room block. The data present in Table 6.1, suggest significant differences at the site level (χ=15.847, p=0.015) with regard to frequency and type of superpositioning. Post-hoc comparisons between pairs of room blocks also resulted in significant differences between the East and South (χ=8.617, p=0.035), the East and Southeast (χ=10.994, p=0.019), but not between the South and Southeast room blocks (χ=5.143, p=0.162). The differences between the East and other two room blocks seems to revolve around the greater occurrences of encompassing superposition in the South and East room block and the lack of any non-superimposed Pre-Classic rooms in the South room block. The numerous rooms within the same four walls present in the East room block and categorized as encompassing superposition also contributed to these differences.

The length of time elapsed, measured in phases, between occupations of lower and upper superpositioned rooms likewise resulted in significant differences among room blocks (Table 6.2) at the site level (χ=24.803, p=0.001). Interestingly, the only

room block pair to differ significantly was between the East and Southeast room block (χ=18.607, p=0.001). Pairwise chi-squares revealed no significant differences between the East and South (χ=1.729, p=0.421), and borderline differences between the South and Southeast room blocks (χ=6.764, p=0.080). Thus, the time span between overlying structure occupations for the Southeast room block is significantly greater than the spans for East room block and possibly greater than that present in the South room block. This is mostly explained by the constricted location of San Francisco and Georgetown phase structures only in this area of the site. The other room blocks are limited because they do not have access to the earliest structures, this pattern also suggests efforts to maintain ties to ancestors and early places for the group residing in the Southeast room block.

Table 6.2. Ranges in Lengths of Time (Architectural Phase Gaps) Between Superimposed Structures in the North, Southeast and Southwest Room Blocks at NAN Ranch.

Room Block	**0 Phase Gap**	**1 Phase Gap**	**2 Phase Gap**	**Three Phase Gap**	**Totals**
East	5	25	11	0	41
South	1	6	6	0	13
Southeast	1	1	3	3	8
Total	7	32	20	3	62

Overall, the East room block contains the highest frequency of superposition and specifically the most structures that bisect earlier structures (Table 6.1). However, of the total Pre-Classic structures in the vicinity of the East room block four are not superimposed or impacted by later namely Transitional and Classic room construction.

Thus, more of the earlier pithouses in the South and Southeast room blocks are superimposed by later construction than the East room block, even though the East room block contains more overall counts of superpositioning. Most of the construction that resulted in superpositioned structures took place in the Transitional and Classic periods. A good example of this is that the later occupation of Classic Room 58 incorporated the walls of the earlier superimposed room into benches that were plastered over (Shafer 1981:81). However, not all structures were superimposed with this intimacy to previous ones as observed in Room 58. Transitional Granary 51 was not aligned regarding earlier Three Circle structures, nor was later Classic architecture built in direct reference to the granary. Room function may play a role in determining how strong the connection of space is during building episode.

While dichotomies can limit the variability of past structures, here it is useful to view changes in room/structure function through time under the lens of domestic or storage as opposed to ceremonial primary functions. Reuse of domestic or ceremonial space between architectural phases suggests great continuity in room function through time within the East room block. For example, above Three Circle Great Kiva 43 lies Room 41 likely considered a corporate kiva. Similarly overlying burned Great Kiva 52 are two rooms (Rooms 18 and 45) whose unique architecture and large floor areas indicated that they too functioned as places of communal or corporate rituals. Indeed, Room 45 incorporated earlier Classic Corporate Kiva 18 which superimposed Transitional Room 57. Thus, even though over a hundred years passed between occupations of structures, it appears that memory concerning those Great Kivas

continued and may have even legitimized later activities conducted above in the same sacred spaces.

While the South room block, like that of the North, contained no structures that predate the Three Circle phase, all pre-Classic structures are superimposed by later architecture. Indeed, Transitional Room 115 superimposes pithouse 116 and is enclosed within Classic room 109. Similarly, Pithouse 102 which intrudes upon earlier Pithouse 103, is superimposed by Transitional Room 104 which underlies Classic Room 39. Room 39 was added onto throughout the Classic until the North wall was five courses thick (Shafer 2003:98). Like the North room block there is great continuity in space.

As a locale of a founding lineage, all of the Georgetown and San Francisco phases pithouses are confined to the Southeast group. This area houses the earliest cases of architectural superposition and those with the largest gaps. With a maximum vertical superposition of three differently aged structures, there is a clear effort to closely associate later structures with earlier ones. And while no Classic rooms superimpose the Transitional Rooms 97 and 99 in the Southeast cluster, isolated Rooms 92 and 93 do overlap with San Francisco Pithouse 86 a few meters to the west. The Southeast room block provides the best example of residential continuity, through the efforts of successive generations and occupying the same place through Classic Period. Whether the isolated rooms consist of an isolate family group or special use locale, it appears that they area was consistently reclaimed and used during the entire

occupation of the site. Most importantly, groups inhabiting this local demonstrated social memory going back the furthest than groups at other room blocks.

In sum, the site of NAN Ranch contains a great deal of architectural superposition, only partly the result of the additional Transitional phase. Significant differences occur between room blocks with regards to the types of superpositioning and thus the strength and intimacy with the earlier structures they reside over. The East room block contains the greatest overall frequency and frequency of encompassing and bisecting superposition. However, relative to the presence or absence of overriding structures for pithouses in the vicinity is lower for the East room block. That is to say, unlike the other two room blocks the East did not build over all of its existing structures. When room blocks were compared for differences in time among superpositioned occupations, the Southeast room block exhibited the greatest reach into the past. Indeed, this locale is the only recorded place for Georgetown and San Francisco phase structures at the site. Overall great continuity in space is demonstrated by the construction of each room block, but the continuity in sacred space and the Transitional and Classic architecture over both Three Circle Phase Great Kivas in the East room block may set it apart somewhat.

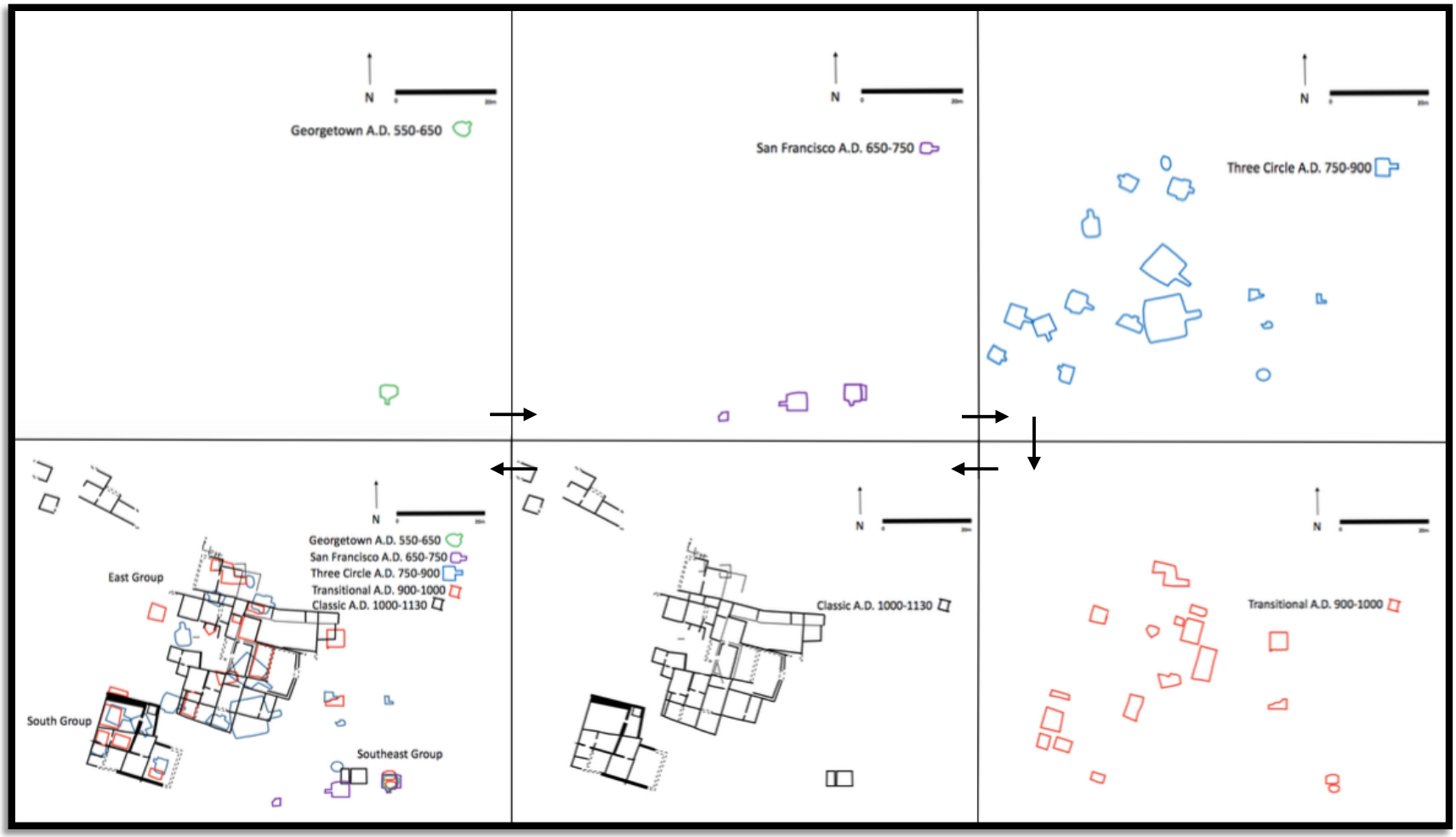

Figure 6.1. Architectural phases of occupations demonstrating the superposition at NAN Ranch (after Shafer 2003). Structures outlined in green date to the Georgetown phases (A.S. 550-650, purple defines San Francisco phase structures (A.D. 650-750), Three Circle phase (A.D. 750-900) structures are outlined in blue, Transitional (A.D. 900-1000) are shown in red, and Classic (A.D. 1000-1130) are shown in black.

Galaz. There is no apparent overall plan for community and structure layout of Galaz (Anyon and LeBlanc 1984:31). Thus, there existed less structural limitations with where structures can be placed with the exception of already existing neighboring rooms. Placement of many rooms were perhaps governed by social structures such as lineage continuity as well as functional constraints, but not either by itself. In total, I recorded 47 structures are either the underlying later or overlying earlier structures at the site. No Classic room block was built in a locale without previous inhabited structures.

Most (76%) of the superpositioning involves Classic rooms over pithouses, but there are a few instances of pithouses built over or in some cases within earlier structures (Figure 6.2). The first case of superposition at the site occurs during the San Francisco phases where a later cobble room and antechamber is built over an earlier San Francisco phase pithouse. Three Circle Pithouse 127 is also superimposed over the entryway of pithouse 130 and Earlier pithouse of that same phase. Pithouse 27B is located entirely within the confines of a Georgetown pithouse pithouse. Small for a Three Circle phase pithouses, the similar orientations of both structures and the reuse of some interior postholes suggests that those responsible for the later construction had much knowledge of the earlier structure even though at least 100 years separates the occupations (Anyon and LeBlanc 1984:66).

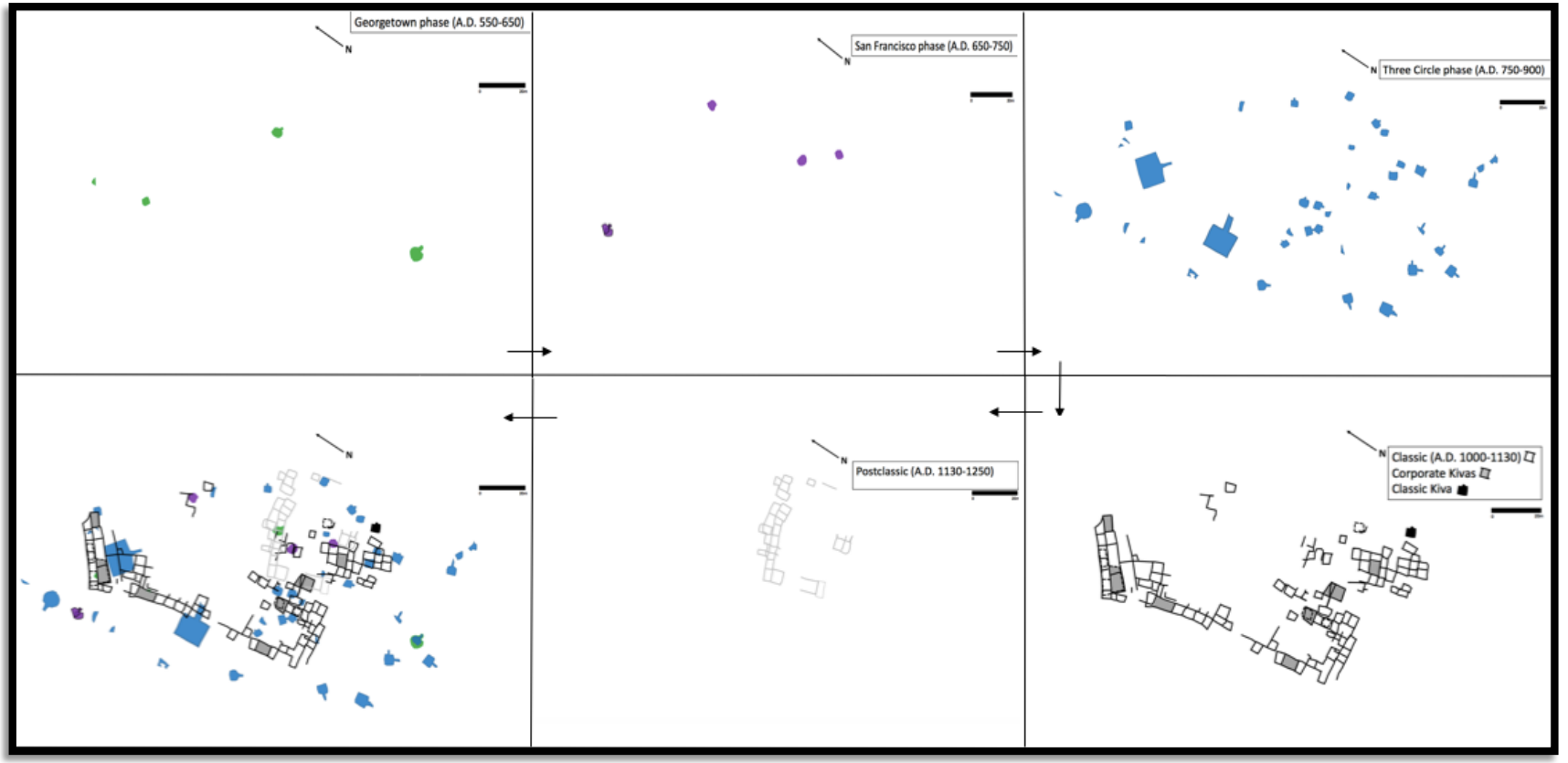

Figure 6.2. Map of superposition at Galaz (after Anyon and LeBlanc 1984). Structures outlined in green date to the Georgetown phases (A.S. 550-650, purple defines San Francisco phase structures (A.D. 650-750), Three Circle phase (A.D. 750-900) structures are outlined in blue, Classic (A.D. 1000-1130) is shown in black, and Postclassic (A.D. 1130-1350) is shown in grey.

Of the three sites in this study, only Galaz has a significant Postclassic occupation, as it is the only evidence of architecture built after the Terminal Classic period (A.D. 1130) and into the Black Mountain phase (A.D. 1130-1300). Because of the orientation of the 23 room, U-shaped room block towards the river and clearly associated but not directly aligned with the underlying Classic Southeast room block (Anyon and LeBlanc 1984:144), it appears that while the tradition of superpositioning continued after much of the population left the site, the manner in which it was performed altered. However, it is still built above a Georgetown pithouse, which suggests continuity with the memory performances of the North room block during the Classic period.

If we examine the frequencies of superpositioned structures for each room block, on a presence and absence basis, it becomes clear that some room blocks present a greater knowledge and intimacy with and over the past than others. To further examine patterns among room blocks and lineage groups inhabiting the site, the types of superposition (encompassing, bisecting, and touching) and thus the intimacy of the relationship between the structures are compared. No statistically significant differences occur among all room blocks (χ=5.976, p=0.426) as listed in Table 6.3.

Table 6.3. Frequencies and Types of Superpositioning at Galaz.

Room Block	Encompassing Super-position	Bisecting Super-position	Touching Super-position	Not Superimposed	Total Super-position Instances
North	1	13	5	6	19
Southeast	2	14	5	7	21
Southwest	1	3	3	8	7
Totals	4	30	13	21	47

Subsequently, if room blocks do not differ in their relative presence or absence of superpositioning, do they differ in the age difference between the occupation of the underlying structures and the construction of the overlying ones? The number of gaps between chronological phases of superimposed structures (Table 6.4) was examined and accordingly resulted in its failure to reject the null hypothesis that there is no difference. Similarly, pairwise chi-square tests resulted in no statistically significant differences between the North and Southeast (χ=6.392, p=0.172), the North and Southwest (χ=1.857, p=0.603), and the Southeast and Southwest room blocks (χ=4.741, p=0.315). Thus, any observed differences between room blocks cannot be distinguished from the vagaries of sampling. Classic rooms built over Three Circle phase structures with a gap of only one architectural phase was the most common form of superpositioning at the site. Nearly 65 percent of the time, inhabitants demonstrated their affinity and ties to places of the recent past not exceeding three to four twenty-five year generations.

Table 6.4. Ranges in Lengths of Time (Architectural Phase Gaps) Between Superimposed Structures in the North, Southeast and Southwest Room Blocks at Galaz.

Room Block	0 Phase Gap	1 Phase Gap	2 Phase Gap	Three Phase Gap	Four Phase Gap	Totals
North	1	15	1	2	0	19
Southeast	3	13	3	1	4	21
Southwest	1	5	1	0	0	7
Total	5	33	5	3	4	47

Quantitatively, there are no differences in superposition with regards to either frequency or the passage of time between the occupation of the older structure and the construction of the later structure. Qualitatively, there are some cases in the North room block that call for a quick discussion. The North room block may have fewer examples of superposition, but does have Classic rooms lying above and encompassing two of the five total Georgetown structures. Thus, quantity of architectural superposition may not be as important as quality and the kinds of intimacies groups living at these sites had with their ancestors and past places.

Room 15 and SWM-D, both considered to be corporate kivas, and the former with the most elaborate floor seen at the site, both overlie a Georgetown phase structure. They are the only Classic rooms to be positioned on top of the earliest structures of the site, and might indicate a subtle difference in which groups have access and knowledge of the earliest structure and occupants of the site. Equally significant, both Great Kivas 42A and 73 underlie pueblo rooms in the North room block, perhaps because they were corporately owned (Gilman and Stone 2013). No rooms in the other room blocks overlie earlier ceremonial structures. Thus, while all

groups residing at Galaz appear to perform and maintain memory at the household and lineage level, those in the North room block might be performing their memory and genealogy at the community level as well as at the household and lineage scale.

Change in room function also appear to help unravel differences between room blocks. Although the distinction between ceremonial or communal and domestic is greatly oversimplified and many rituals were performed in seemingly domestic contexts, it is a useful heuristic device. There are five instances where the function or importance of the upper room does not match that of the lower structure. They are as follows: A Classic corporate kiva bisecting a Three Circle phase pithouse, two Classic habitation rooms bisecting two earlier Three Circle Great Kivas, one Classic corporate kiva bisecting a Georgetown structure, and one Classic corporate kiva encompassing a Georgetown phase pithouse. Perhaps the building of newer ceremonial rooms in areas not formerly used as sacred spaces was acceptable if they were done in locales of the first inhabitant and spiritually important ancestors of the site. likewise, perhaps there was more power or significance in demonstrating ties to earlier ceremonial structures and the activities conducted within them.

In sum, the site of Galaz contains many instances of superpositioning of Classic pueblo rooms over earlier pithouses and Three Circle phase Great Kivas. The earliest superpoistioning in the North room block and the entire site, took place during the San Francisco phase. Both Three Circle Great Kivas were located in the confines of the North room block and both were superimposed. However, statistically, no room block differed significantly in either frequency of superpositioning nor in the length of time

between vertically stacked structures. Each room block appears to purposefully construct new edifices over many, roughly half, of the existing pithouses in their vicinity. So, while some places are remembered and referenced, many are equally forgotten. The Postclassic room block suggests a continuity in the tradition of superpositioning. While the orientation of the room block diverges from the orientation of the Classic room blocks, suggesting an altered relationship between the two room blocks of different ages, it is located above one of the five Georgetown phase pithouses.

Mattocks. The relatively few pithouses recorded for the Mattocks (n=4; 80b, 115b, 213, 286b) compared to Galaz's 27 (Anyon and LeBlanc 1984:4) and NAN's 24 (Shafer 2003:21-54), has lead Gilman and LeBlanc (2017:242, 491) to conclude that this site is a late arrival on the Mimbres scene and may have only been founded by a few families. All the pithouses that were excavated by Nesbitt prior to the Mimbres foundations fieldwork are either Classic or do not contain enough data to be dateable. The only instances of superposition were documented by the Mimbres Foundation. No other cases of superposition are recorded in Nesbitt's field notes or report although there could be some below later Classic pueblo rooms (Gilman and LeBlanc 2017:12).

A total of three instances of superposition are worthy of discussion. Two consist of Classic pueblo rooms superimposed over earlier Late Late Pithouse period Structures (286 and 115). The remaining instance concerns a Classic extramural activity surface (80a) constructed above the only Georgetown phase Structure (80b) currently known

for the site (Figure 6.3). It is included here because at various times this before, during, and after the use of this surface, intrusive burials were interred into the lower pithouse through the extramural surface. The presence of this surface apparently did not inhibit the memory needed to inter individuals below it.

As Table 6.5 demonstrates, all earlier pithouses, with the exception of Great Kiva 213 were superimposed by Classic period architecture. The east-facing entryway of 213 may have been superimposed by the west wall of the 200s room block (Gilman and LeBlanc 2017:261), but as this structure remains largely unexcavated it is not known for certain and will not be discussed further. Taken together, the three instances of superposition by later structures of surfaces suggests that three of the five room blocks participated, albeit infrequently and with different intimacies, in these memory performance practices. As a whole the late date of Mattocks occupation and the dearth of early pithouses suggest less superposition than at the other two sites studied.

Table 6.5. Dates of Both the Upper and Lower Structures for the Architectural Superposition at Mattocks.

Room Block	**Room**	**Lowest Structure Date**	**Uppermost Structure Date**	**Time Gap between Occupations**	**Total**
100s	115 (a/b)	Three Circle	Late Classic	1	1
200	286 (a/b)	Three Circle	Early Classic	0-1	1
Southeast	80 (a/b)	Georgetown	Classic (extramural)	3	1
Totals					3

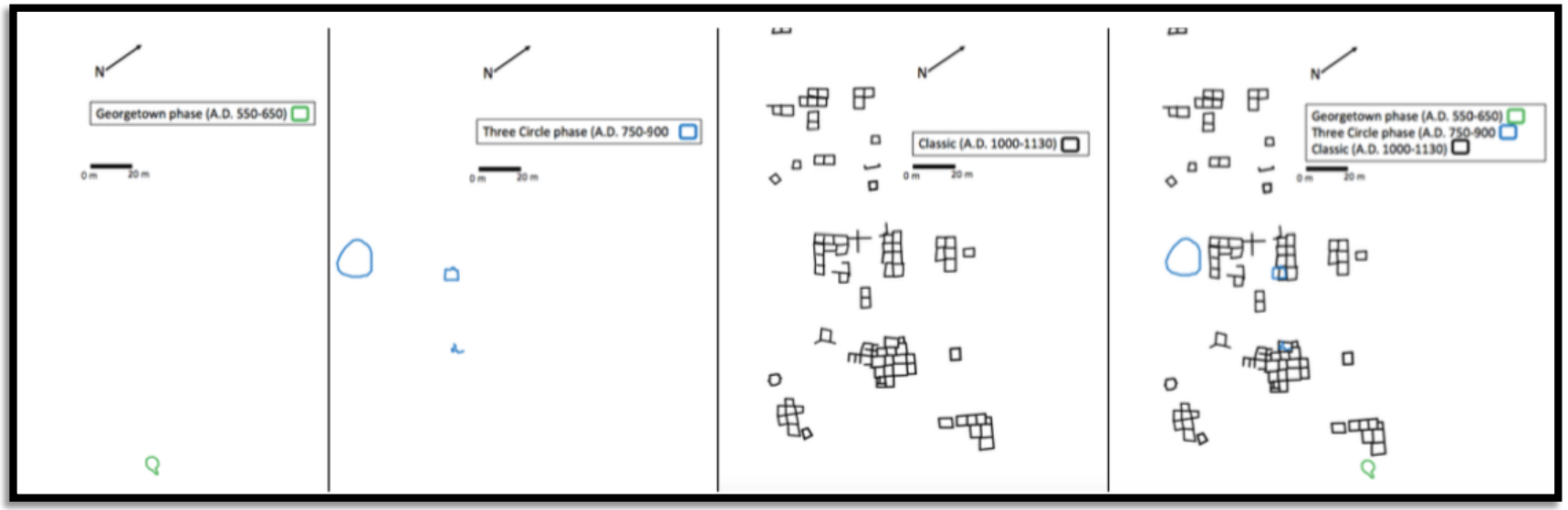

Figure 6.3. Map of superposition at Mattocks (after Gilman and LeBlanc 2017). Structures outlined in green date to the Georgetown phases (A.S. 550-650, Three Circle phase (A.D. 750-900) structures are outlined in blue, and Classic is shown in black.

Room 286a is surface room, according to excavators with regards to the lower Three Circle Phase Pithouse 286b. The east half of Pithouse 286b is contained within the limits of Room 286a. Gilman and LeBlanc (2017:111) describe the orientation of the latter pueblo room as careful alignment which suggested to them that the builders of the upper room were aware of the pithouse location and placed all but the west wall beyond the limits of the pithouses walls presumably to achieve better wall stability. This description indicates three things. First that the inhabitants of the earlier structure most likely built the pueblo room. It is probable that not a lot of time passed between the abandonment of Pithouse 286b in the Late Three Circle phase and the filling and building of Room 286a in the Early Classic period. Gilman and LeBlanc (2017:24) have characterizes the rapid succession of events as "virtually immediately." Secondly, it suggests that the same inhabitants negotiated the pithouse-to-pueblo transition in the same constructed space and that continuity in the use of that space was important. Lastly, that people responsible for this continued use of space are the same families that may have helped found the site (Gilman and LeBlanc 2017:87).

While superimposed over an earlier Three Circle phase pithouse, the Late Classic room of 115a did not directly reference the underlying structure as the builders of Room 286a did (Gilman and LeBlanc 2017:124). Sometime after A.D. 935, the pithouse was filled and the room above was constructed. Instead of taking into account existing walls, the masonry room walls extended over pit fill but did not extend below floor level as would be expected to provide foundational supports (Gilman and LeBlanc 2017:160). Most likely the same family that inhabited the

pithouse and build the 100s room blocks constructed this structure, but the continuity in space was highlighted less and the lower structure appeared to have less continued special significance as opposed to Pithouse 286b.

Lastly, there is one special instance of interior features of different ages touching in Room 435 that deserve recognition. This case relates to superposition as the room was remodeled but the central hearth and the central posthole in the upper floor cut into the hearth of the lower occupation (5S-20H) associated with the lower ramada surface. The two hearths were thus in approximately the same location in their respective floor surfaces (Gilman and LeBlanc 2017:226).

In sum, Mattocks has much less architectural superposition than the other two sites investigated. This is primarily the result of little Late Pithouse occupation of the area. That said of the two Three Circle pithouses, both are superimposed underneath two separate room blocks, although 286a has greater continuity with 286b than does Room 115a with 115b. The earliest Georgetown phase pithouse is superimposed by a Classic activity area and possibly the East entryway of Great Kiva 213 was superimposed by the west wall of the 200s room block, which suggests that despite the few pithouses present, inhabitants were keen to demonstrate their ties and associations with those physical remains of past times.

Pre-room burials and relationship to ancestors

If later structures are commonly built over or incorporating the remains of earlier structures, then the placement of these later structures appears meaningful in relation to those they superimpose. It could be equally likely that the presence of

earlier extramural burials could also play a role in governing where and over what spaces a structure is constructed. Presumably extramural burial was a more common practice during the Late Pithouse Period than in the Classic (Shafer 2003:37). Therefore, the relative presence or absence of burials that may predate rooms may be an additional line with which to examine continuity in a groups occupation of space for a variety of purposes, whether inhabited by the living, the dead, or both.

NAN Ranch. I documented five instances of burials at NAN Ranch that may pre-date rooms later constructed over them, but only four of them have an associated room number (Table 6.6). It is difficult to date the older burials, but of the overriding structures, one (Room 99) was constructed during the Transitional Period, and the remaining three (Rooms 39, 76, and 79) during the Classic Period. This would suggest a spatial pattern where each of the room blocks contained at least one pre-room burial with the South room block containing two of the four burials (Figure 6.4). Because of the extremely low counts, I chose not to conduct a chi-square test.

Table 6.6. Frequencies of Rooms with Pre-Room Burials for Each Room Block at NAN Ranch. Rooms without burials that predate are either and rooms with no data available are both listed in the absent column.

Room Block	Pre-room Burials Present	Pre-Room Burials Absent	Total
East	1	58	59
South	2	17	19
Southeast	1	9	10
Totals	4	84	88

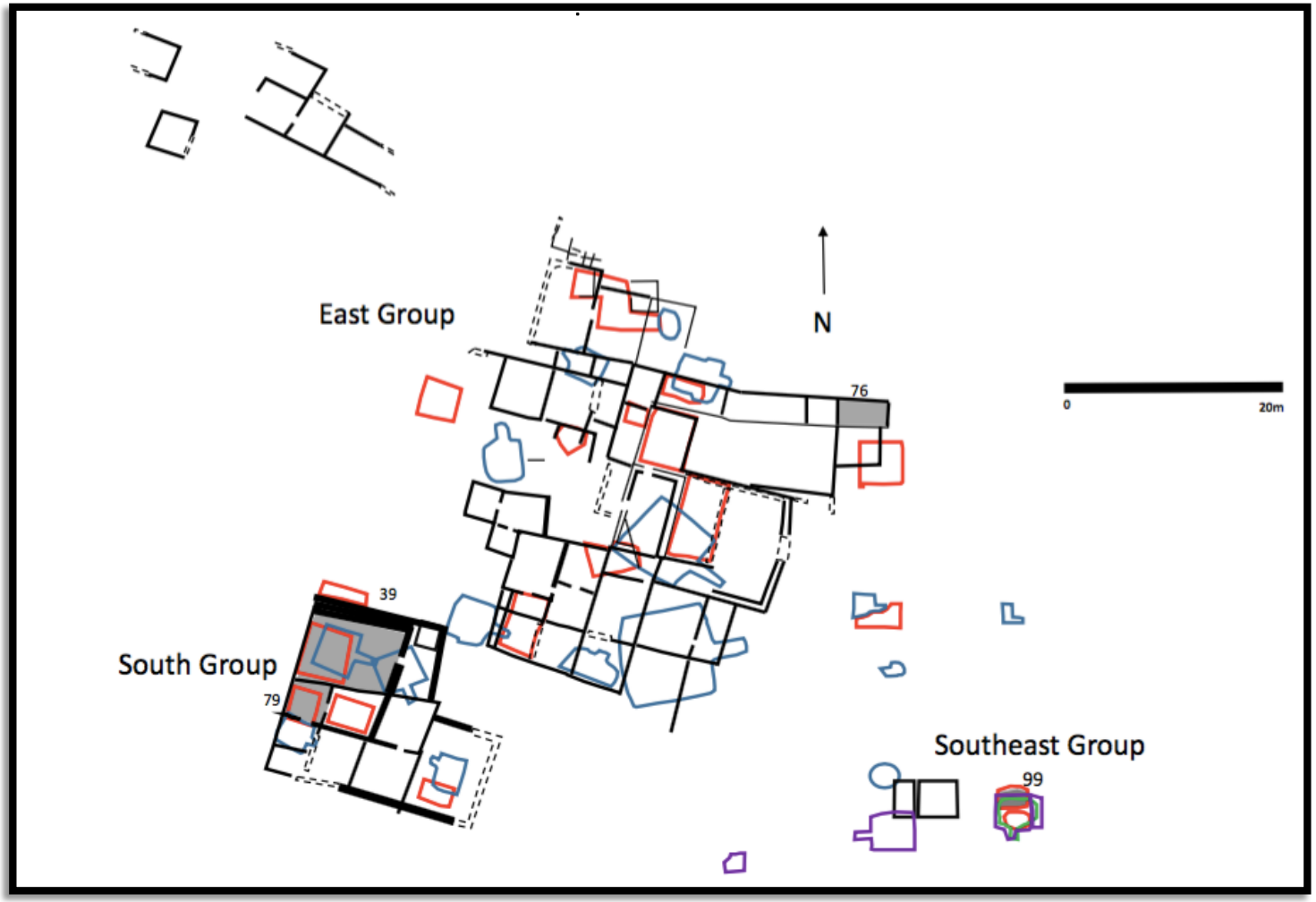

Figure 6.4. Map of locations of pre-room burials at NAN Ranch. Rooms with pre-room burials are shaded and numbered. Structures outlined in green date to the Georgetown phases (A.S. 550-650, purple defines San Francisco phase structures (A.D. 650-750), Three Circle phase (A.D. 750-900) structures are outlined in blue, Transitional (A.D. 900-1000) are shown in red, and Classic (A.D. 1000-1130) are shown in black

An additional individual (Burial 9) is described as a Late pithouse and Pre-Classic room burial but listed as extramural (Shafer 2003:30). The burial in Room 76 of the East room block may not have definitively predated the room but definitely predated its use as a granary (Shafer 2003:76.). Burial 215 in Room 79 of the South room block was possibly interred before the first floor was built and was removed before the second floor was constructed (Shafer 1987). An infant burial also most likely predates Room 39 in the South room block (Shafer 2003:80, 94). It is assumed that this infant was located outside the confines of the 102 and 104 structures otherwise, they would be categorized under one of those room's burial assemblages. Burial 181 in Transitional room 99 of the Southeast room block is beneath a post hole that would have disturbed the burial had a post been inserted (Shafer 1987:18). In sum, pre-room burials are most likely present for each of the room blocks, beginning as early as the construction of Transitional buildings as in the Southeast group, but more commonly in the Classic period.

Galaz. I could find no descriptions of subfloor burials that could be possibly identified as pre-room burials for the site of Galaz.

Mattocks. There are a total of six pre-room burials documented for the Mattocks site. Because of the low counts, chose not to conduct a chi-square test to assess differences between room blocks. One of the structures constructed over the burials dated to the Three Circle Phase of the Late Pithouse Period, and the remaining five were built during the Classic. As seen in Table 6.7, pre-room burials are present at three of the five room blocks including the 100s, 200s, and 400s room blocks. Room

114b contains a possible pre-room burial. It is uncertain whether this individual (Burial 5-9) was interred before the first floor of the early Classic room was built or shortly after, but it was interred before the second floor was constructed (Gilman and LeBlanc 2107:157). In the 200s room block, Burial 8-15 most likely predated the Three Circle phase Pithouse 286b because an interior posthole made during the construction cut into and disturbed much of the skeletal remains (Gilman and LeBlanc 2017:112).

Table 6.7. Frequency of Mattocks Rooms with Burials that Predate Any Structures. Rooms without burials that predate are either absent or no data is available for those rooms.

Room Block	Pre-Room Burials Present	Pre-Room Burials Absent	Total
100s	1	22	23
200s	1	24	25
300s	n.d.	18	18
400s	4	11	15
Southeast	0	9	9
Totals	6	84	90

The remaining cases involve three rooms (426, 431, and 435) of the 400s room block (Figure 6.5). In Room 426 a hearth impacted and intruded upon an adult woman presumably an ancestor (Gilman and LeBlanc 2017:256). Locus 5-13 within Room 431 contains more than one burial, but at least one according to Gilman and LeBlanc 2017:217) is pre-room. The reasoning behind this designation is that it is plastered over making it at the latest contemporaneous with the use of the structure, but it is unusually deep if it had been interred from the floor level of the occupied room. Gilman and LeBlanc (2017:228) describe Burials 6-23 and 5-17 in Room 435 as being pre-room and pre-ramada as the pits were only discernable below the ramada surface

which predated the room construction. While 80b in the Southeast room block does not contain pre-Georgetown burials, many of the intrusive Classic internments do predate the use of the plaza/or activity surface, suggesting continuity in the use of that structure. These are not counted in the table below. In sum, only a few pre-room burials are documented for Mattocks at three of the five room blocks, and all but one burial is superimposed by Classic architecture.

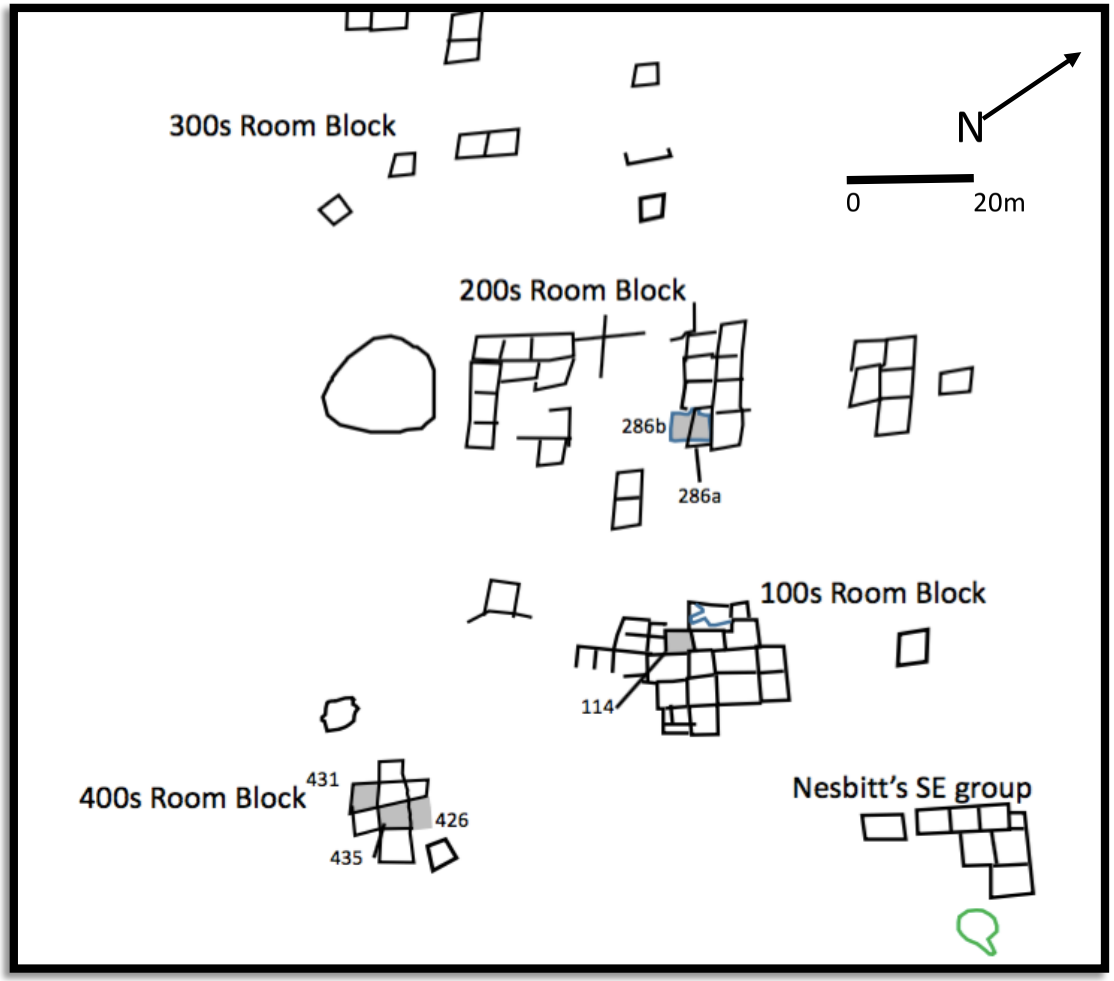

Figure 6.5. Map of locations of pre-room burials at Mattocks. Rooms with pre-room burials are shaded and numbered. Structures outlined in green date to the Georgetown phases (A.S. 550-650), Three Circle phase (A.D. 750-900) structures are outlined in blue, and Classic (A.D. 1000-1130) are shown in black.

Multiple floors

The presence or absence of multiple floors offer an additional line of evidence to further tease apart the relative continuity or discontinuity of space is whether or not structures contained multiple floors. By floors I mean discrete flooring episodes, not just re-plastering of the floor or patching the floor. Re-flooring episodes often take place when a structure is renovated or remodeled but does not always have to be. Thus, flooring episodes may be done more frequently than refurbishing or remodeling structures. New plastered floors can be an activity associated with renewal (Mills 2008). Examining the frequency of structures of different times and belonging to different room blocks with multiple floors, offers an additional vantage to view any changes in the perceived function or use of constructed spaces. It may be a subtler indicator of relative changes and activities through time than remodeling although the two indexes are highly related. To Shafer (2003:89) re-flooring was a measure of not just continuity and thus survival of the household, but also of wealth. Groups that could continually invest in the maintaining the same spaces over great periods of time must have had wealth, labor, or at least important reasons to do so.

NAN Ranch. As Table 6.7 demonstrates, there is a total of 17 rooms with two or more floors present at NAN Ranch. One instance of multiple floors takes place in a San Francisco structure and two within Three Circle pithouses, and one in a Transitional structure. The remaining assemblage dates to the Classic period or are the result of superpositioning where an earlier structure is enclosed and directly referenced in the building of the later structure(s) (Figure 6.6). Many of the rooms

mentioned here as having multiple floors also have numerous re-plastering episodes. Each room block contains rooms with multiple floors (Table 6.8) However, only the East and South room blocks contain rooms with three or more floors, and of the two room blocks the East one contains the most. This observed difference in Table 6.8 is not statistically significant at the site level (χ=1.174, p=0.556), nor in pair-wise chi-square tests between the East and South room blocks (χ=0.423, p=0.515), the East and Southeast room blocks (χ=0.917, p=0.338), nor the South and Southeast room blocks (χ=0.467, p=0.495).

Table 6.8. NAN Ranch Room Blocks with Two or Three or More Discrete Flooring Episodes.

Room Block	**Two Floors**	**Three or More Floors**	**Total**
East	5	5	10
South	4	2	6
Southeast	1	0	2
Totals	10	7	17

Five rooms in the East room block contain three or more discrete flooring episodes, more than the other room blocks, suggesting great continuity its built space through time. Classic Rooms 11/22, 63/23, 25/75 and Transitional Rooms 58 and 91 contain as many as five floors for each room. The first three were often habitational rooms that may have at some point been used for storage as well. The remaining two rooms were most likely of ceremonial or communal importance. Room 91 was most likely functioned as a communal or ceremonial room and thus its four floors may relate to renewal or other such activities carried out within its walls (Shafer 1986:12). With the exception of Room 91, each of the rooms discussed in this paragraph contain

floors of exactly the same dimensions and areas. See the map in Figures 6.7 and. to compare the rooms that have the same floor areas within the same four walls.

For the South room block, many rooms are superimposed and contain multiple flooring episodes that date to the Classic. Room 29 for example is superimposed over a Transitional room but also was re-floored an additional number of times some of which might be responses to episodes of burning. Room 94 burned and was re-floored as many as three times. Pithouse 116 was superimposed by an activity surface (Shafer 1996:29). The southeast room block contained only one instances of multiple floors in San Francisco Pithouse 86, but recall that this locale has the many only examples of Pre-Transitional superposition at the site.

In sum, there appears to be re-flooring activities starting as early as the San Francisco and Three Circle phases, but mostly within Classic age structures and especially within Classic structures superimposing earlier structures. While all the room blocks had at least one instance of re-flooring, the East room block contained overall the most flooring activities as well as the greatest frequency of rooms with more than two floors, but this pattern is not statistically significant.

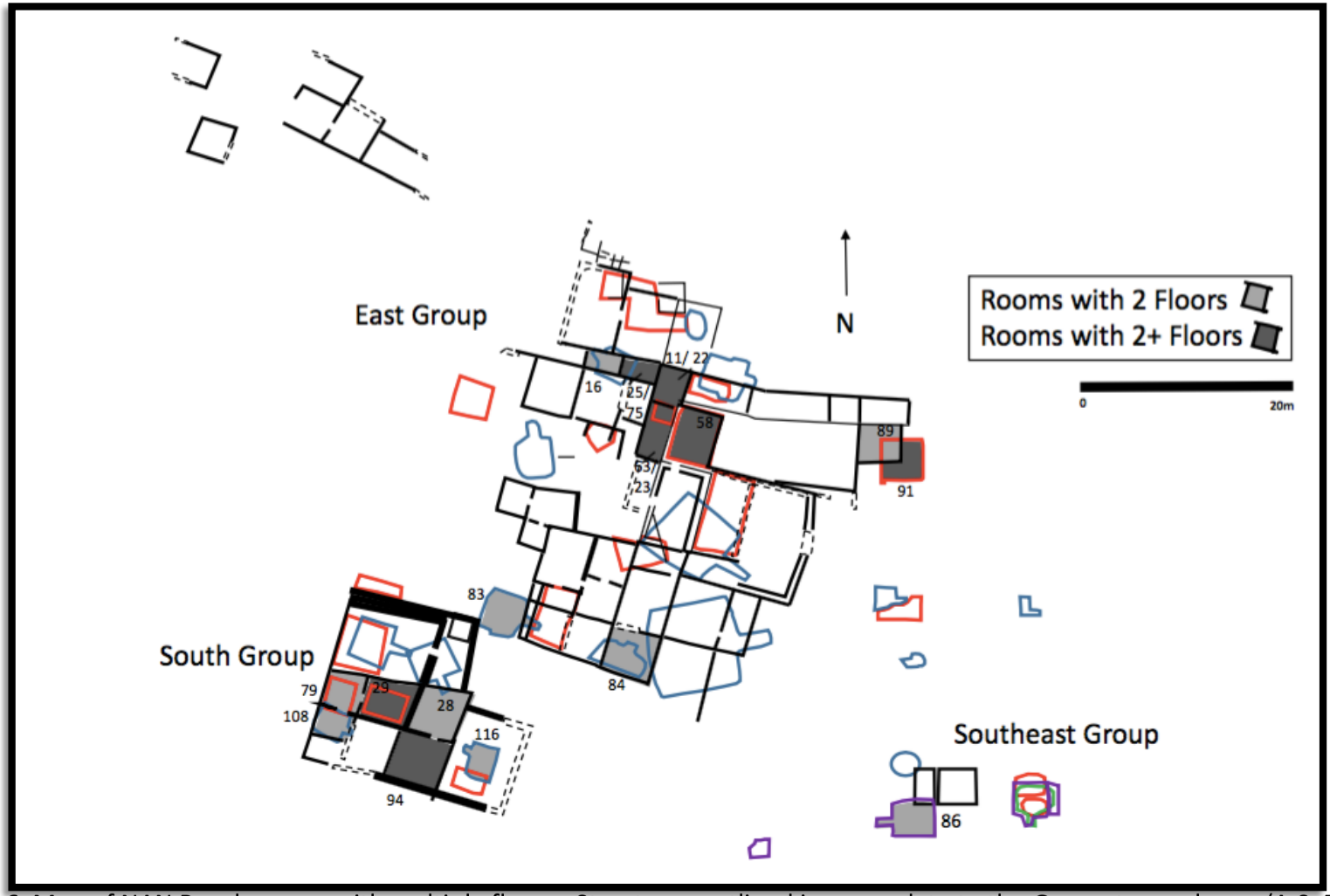

Figure 6.6. Map of NAN Ranch rooms with multiple floors. Structures outlined in green date to the Georgetown phases (A.S. 550-650, purple defines San Francisco phase structures (A.D. 650-750), Three Circle phase (A.D. 750-900) structures are outlined in blue, Transitional (A.D. 900-1000) are shown in red, and Classic (A.D. 1000-1130) are shown in black.

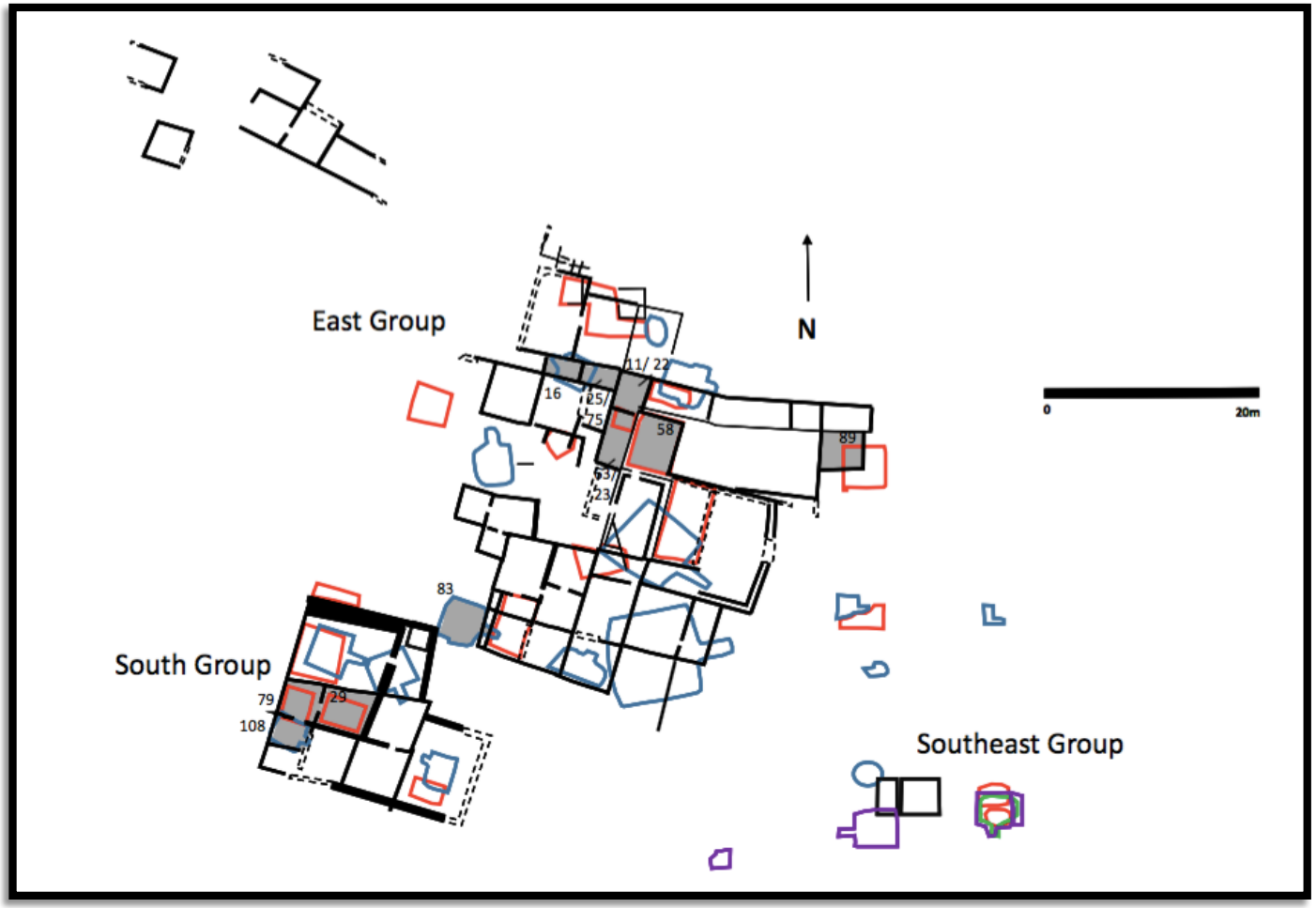

Figure 6.7. Map of NAN Ranch rooms with multiple floors of the same dimensions within the same four walls (Shaded). Structures outlined in green date to the Georgetown phases (A.S. 550-650, purple defines San Francisco phase structures (A.D. 650-750), Three Circle phase (A.D. 750-900) structures are outlined in blue, Transitional (A.D. 900-1000) are shown in red, and Classic (A.D. 1000-1130) are shown in black.

Galaz. Many of the structures at Galaz had multiple floors. Most contained just two floors, an upper over a lower often with some fill between the floors. Mostly it is Classic rooms that inhabitants added new floors to meet their present needs, but three pithouses (one San Francisco, one Three Circle, and one Classic also contained more than one floor (Figure 6.8). As seen in Table 6.9, overall the North room block contained the most structures with multiple floor suggesting extended occupations of the same structure over greater periods of time. The North room block also contained the highest frequency of structures with three or more floors (Figure 6.8). However, a chi-square based on the data present in Table 6.9, demonstrated no significant differences at the site level between room blocks with regards to overall floor counts (χ=0.991, p=0.609). The likelihood that the observed differences between room blocks resulted from chance are high. Similarly, pair-wise chi-square tests between the North and Southeast room blocks (χ=0.033, p=0.856), the North and Southwest room blocks (χ=0.982, p=0.321), nor the Southeast and Southwest room blocks (χ=0.562, p=0.453) resulted in no significant differences between room blocks.

Table 6.9. Galaz Room Block Frequencies of Rooms with Two or More Floors.

Room Block	**Two Floors**	**Three or More Floors**	**Total**
North	10	4	14
Southeast	6	2	8
Southwest	8	1	9
Totals	24	7	31

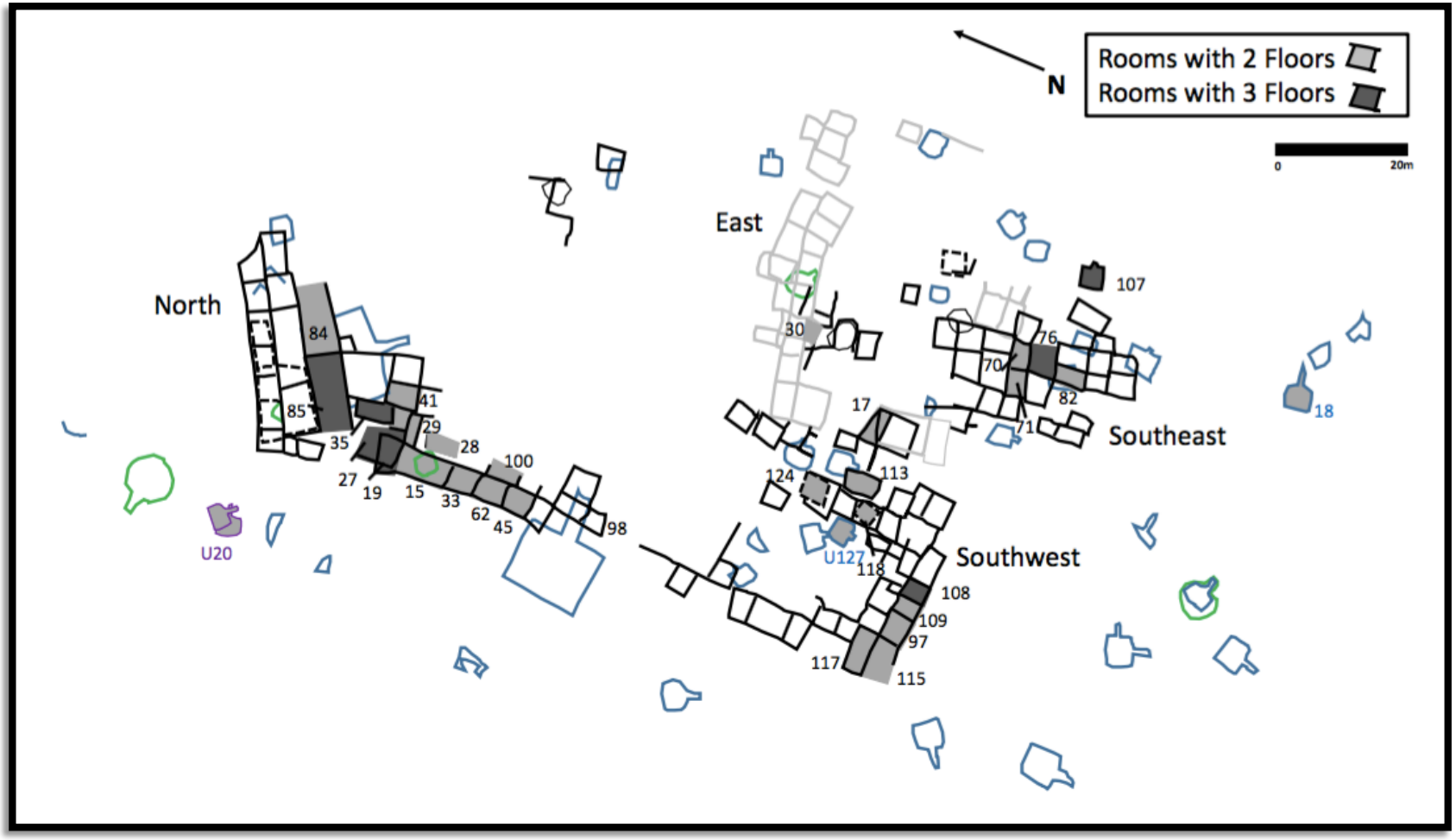

Figure 6.8. Map of Galaz rooms with multiple floors. Rooms with multiple floors are shaded and numbered. Green represents Georgetown age structures (A.D. 550-650), San Francisco phase structures (A.D. 650-750) are outlined in purple, Three Circle phase (A.D. 750-900, is blue, (Classic (A.D. 1000-1130) is black, and Postclassic (A.D. 1130-1350) is shown in gray.

Secondly, I will quickly discuss cases of noteworthy multiple floors and to clarify some related details. Within close proximity of the North room block, San Francisco phase Pithouse 20 is superimposed by a later San Francisco cobble room and antechamber overlap the earlier floor and entryway, thus their inclusion here. This suggest that re-flooring started as early as that time. Great Kiva 73 also in the North room block contains a floor renewal or patching, but as it is near the entryway it most likely is the result of wear and not structural renewal in the ceremonial sense (Anyon and LeBlanc 1984:126). Next, two of the three Rooms (85 and 35) with three or more floors are located over Great Kiva 42A, again suggesting that continuity in built ceremonial space remained increasingly important during the Classic occupation of the site. Lastly, of the rooms with multiple floors in the North room block, three stand out due to the upper floor construction. Rooms 84 and 85 superimposed over 42A contain flagstones, and Room 15, a corporate kiva encompassing a Georgetown pithouse, contains the most elaborate floor seen at the site and surrounding sites (Anyon and LeBlanc 1984:108). The upper floor of Room 15 consists of a layer of cobbles covered by basalt slabs, set in adobe.

In the Southeast room block, a few structures are of note. Three Circle pithouse 18 contained multiple floors but the hearth is located in nearly the same place, something observed later at Mattocks (Anyon and LeBlanc 1984:50). Classic Kiva 107 contains as many as three floors, the latter of which contained intrusive burials in the fill between floors (Anyon and LeBlanc 1984:135). Lastly, Anyon and

LeBlanc (1984:100) note that Classic Room 76 contains three total floors, but 76c may date to the Late Pithouse and is partially below Room 82.

In the Southwest room block, one adobe floor in Room 113 is laid directly on top of the earlier adobe floor and Pithouse 127 contains four distinct layers (Anyon and LeBlanc 1984:81, 104). Classic rooms 118 and 124 contained lower floors oriented slightly differently and Room 108 contained a lower floor 108b under Room 114 (Anyon and LeBlanc 1984:105).

Overall, each room block contains rooms with many flooring episodes are indicative of efforts to maintain those spaces, while others do not. No significant differences exist between the room blocks in this regard. However, the three special floors in the North room block may qualitatively suggest qualitative differences with regard to the continuous function of certain important built spaces.

Mattocks. Gilman and LeBlanc (2017) note a total of ten structures with more than one floor (Table 6.9, Figure 6.9) at Mattocks. With the exception of the lower floors of the Three Circle phase pithouses under Rooms 115a and 286a, all of the rooms with multiple flooring episodes dated to the Classic period. All but one of these rooms contained only two floors, the exception being Room 41, the communal granary in the 200s room block. Excluding the 300s room block with its dearth of data, all of the room blocks contained at least one structure with multiple floors and an extended occupation. No statistically significant differences (χ=3.924, p=0.269) between room blocks were found according to chi-square tests performed on data present in Table 6.10.

Table 6.10. Frequencies of Mattocks Rooms with Two or More Discrete Flooring Episodes. The counts were too small to conduct pair-wise chi-square tests.

Room Block	Two Floors	Three Floors	Total
100s	3	0	3
200s	1	1	2
300s	0	0	0
400s	5	0	5
Southeast	1	0	1
Totals	10	1	11

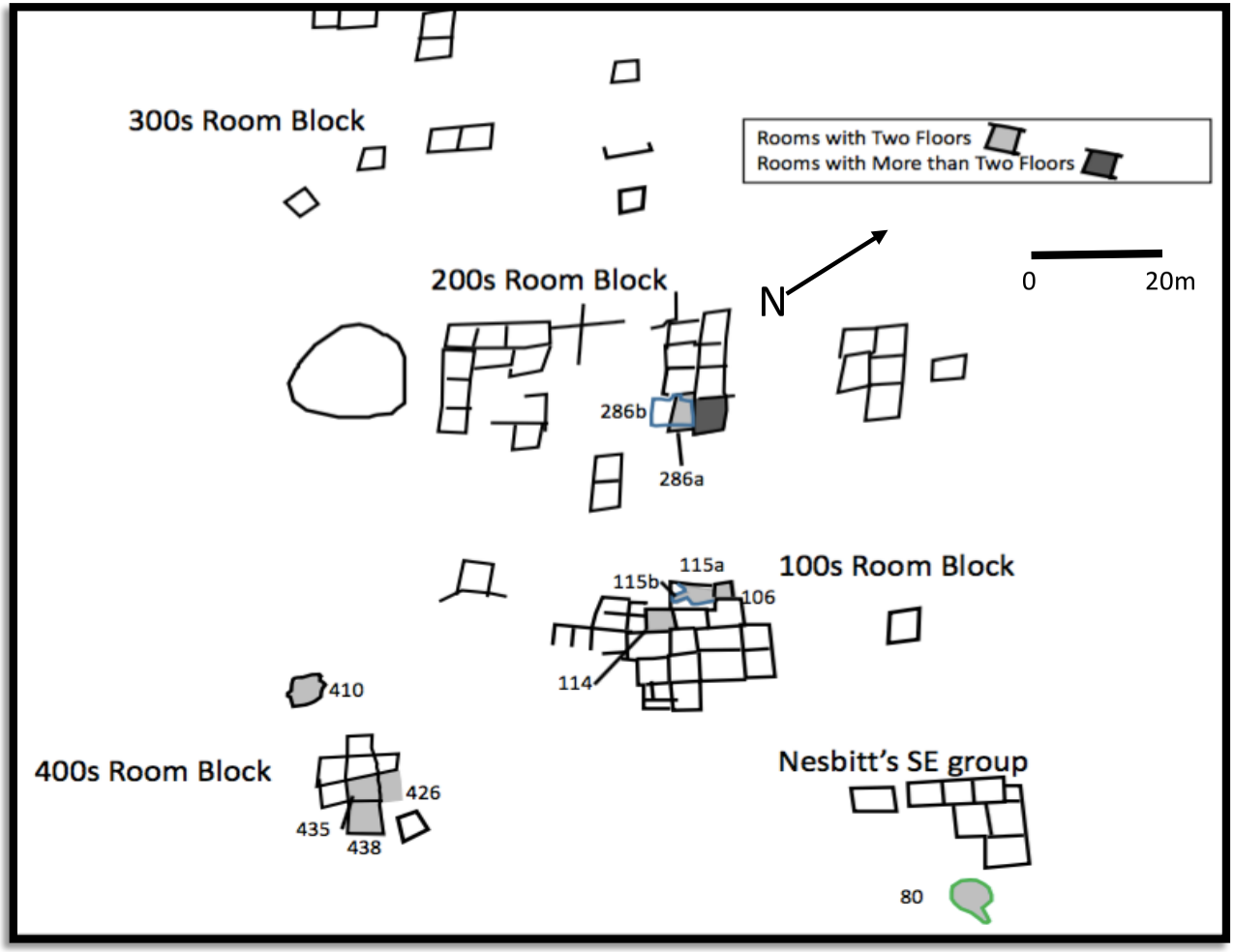

Figure 6. 9. Map of Mattocks rooms with multiple floors. Rooms with multiple floors are shaded and numbered. Structures outlined in green date to the Georgetown phases (A.S. 550-650), Three Circle phase (A.D. 750-900) structures are outlined in blue, and Classic (A.D. 1000-1130) are shown in black.

In the 100s room block, Rooms 106, 114, and 115 each contain two distinct floors. Room 114b is one of the earliest structures and may be a core room for this room block. Both Rooms 106 and 115a were most likely constructed during the Late Classic (Gilman and LeBlanc 2017:107). This suggest that there was a greater time depth between the lower Three Circle age floor and the later Classic floor for 115 than seen elsewhere. Certainly, very little time passed between the occupations of the two floors for 286. The lower pithouse is filled sometime between A.D. 935 and 1000, and the upper floor is built almost immediately after that filling took place (Gilman and LeBlanc 2017:467). Despite the extensive ancient disturbance and removal of most of one of the floors in Granary 41 adjacent to Room 286, as many as three floors are apparent. Gilman and LeBlanc (2017:142) note the presence of an adobe floor as the lowest floor, followed by a later flagstone surface, which may have been topped with another adobe floor.

Structure 410 contains an adobe surface that postdates the Classic pithouse and may be a part of its remodeling. Room 438 was also remodeled and an additional adobe floor was puddled at that time. Room 435 was an earlier ramada surface that was enclosed and became a Classic room (Gilman and LeBlanc 2017:228). The second floor of Room 426 was built after fill was placed over the earlier floor to level it out and may be due to common household repair (Gilman and LeBlanc 2017:256). The second floor for Pithouse 80b in the Southeast group is not so much a habitational floor as a Classic activity surface.

In sum, nearly each room block contained re-flooring events, and no statistically significant differences occur between them. Often due to its superposition above older structures or as part of household remodeling and maintenance. Most do not have changes in function with the exception of Classic activity surface 80a over Georgetown Structure 80b. All of the upper flooring episodes occurred during the Classic period.

Remodeling of structures

Like the frequencies of rooms with multiple floors discussed in the above section, remodeling of existing architecture is indicative of concerted efforts to maintain and upkeep certain built spaces. Thus, differences in relative presence absence or number of remodeling episodes between room blocks and across time might suggest different intensities to keep certain structures functional and maintain them as physical links with the past. Importance of these places is inferred from the continuity of activities and household that inhabited the structured spaces themselves.

Thus, according to this index, a room that is remodeled at least twice suggests more importance was placed on maintaining the structure for present and future uses than one that is not remodeled and abandoned and another built anew to replace it. I define remodeling to include not just additional floors, but also changes in the configuration of the roof, reconfiguration changes affecting the relationship of the structure to others, such as blocked doorways, or changes that would be brought about by alterations in the way the room functioned. Remodeling can also be a logical

outcome related to structure burning, whether intentional or not, and I discuss this for certain rooms below.

NAN Ranch. I documented a total of 15 cases of individual rooms or structures that presented evidence for some form of remodeling at NAN Ranch. Many pithouses and surface pueblo rooms were resurfaced and remodeled to meet changing needs of the inhabitants or to extend the use life of the structure. Often structures are remodeled shortly after or during the occupation of the room and significant remodeling can span the lives of many generations. Thus, most of the remodel activities at NAN Ranch took place during the same time period as the structure date and within the same architectural phase with a few exceptions. Inhabitants conducted remodeling episodes on structures during the San Francisco phases, two during the Three Circle phase on contemporaneous pithouses, two on Transitional structures during that period or into the Classic, and the remaining nine were Classic rooms redone during the Classic period.

Spatially, remodeling occurred at each of the three discrete room blocks but was most common for the East room block and slightly less for the South room block (Figure 6.10). As Table 6.11 shows, the south room block contains nearly as many rooms with at least one episode of remodeling as the north room block despite the disparity in overall rooms. The extent of the remodeling in the South room block suggests to me a greater emphasis by the southern lineage group, but a chi-square test based on the data in Table 6.11 reveals no significant divergences in the extent (χ=1.724, p=0.422). As there were not any statistically significant differences between

the room blocks and because total rooms with remodeling counted less than 20, I did not perform pairwise chi-square tests for each room blocks.

Table 6.11. Frequencies of the Relative Presence and Absence of Structure Remodeling for Room Blocks at NAN Ranch. The absent column also contains rooms with no available data on remodeling.

Room Block	Remodeling Present	Remodeling Absent	Total Structures
East	8	51	59
South	5	14	19
Southeast	2	8	10
Totals	15	73	88

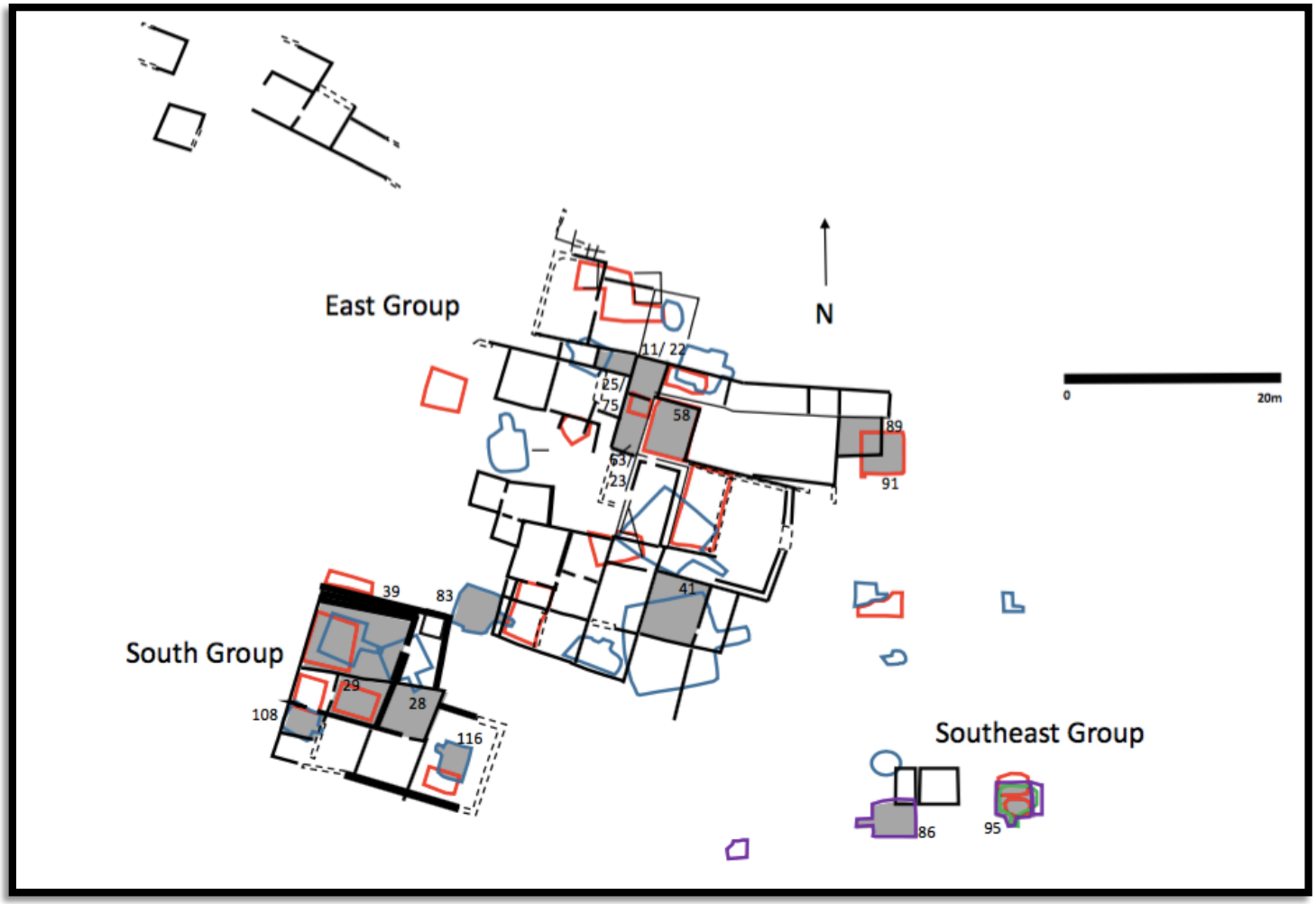

Figure 6.10. Map of NAN Ranch rooms with evidence of remodeling. Rooms with remodeling are shaded and numbered. Structures outlined in green date to the Georgetown phases (A.S. 550-650, purple defines San Francisco phase structures (A.D. 650-750), Three Circle phase (A.D. 750-900) structures are outlined in blue, Transitional (A.D. 900-1000) are shown in red, and Classic (A.D. 1000-1130) are shown in black.

The East room block contained one remodeled Three Circle phase pithouse (83), two Transitional Structures (91 and 58), and five Classic structures. Pithouse 83 was modified significantly and the hearth was relocated often in response to alterations from the entryway (Shafer 2003). Transitional Room 91 was built, used and remodeled by removing the central post and plastering over the hole during the Transitional period (Shafer 2003:48-49). Inhabitants that used Room 58 re-floored it three to five times and exerted considerable effort to keep the room functional by adding a second central post and a new fire box (Shafer 1982:38-40). The use of this structure continued from the Transitional into the Classic period. Room 63/23 resurfaced at least three times and each phased used same center post. Changes made most likely relate to the alteration of the room from a storage area gone a little bit into disrepair, to a small living for floor Room 63B (Shafer 1983:37-38). During the lower occupation of Room 11/22, the room was remodeled from a storeroom to a living area, and re-plastered as many as three times with the plaster extending up the walls (Shafer 1982:41-46). Room 25/75 was remodeled three times and re-floored at least four times. While the room did burn during the time the upper two floors were occupied, the other alterations were most likely due to the conversion of the room from a granary to a small living room (Shafer 1982:46-54).

Pithouse 116 was significantly modified and then shortly sealed after A.D. 850 during the Three Circle phase (Shafer 1990:29). The modifications to Classic Room 108 related to its conversion from a living area to storage area (Shafer1996:22-25). The remodeling for Room 28 occurred during the occupation of 28b when the west wall

was renovated by adding a course, blocking the door to Room 29, and rebuilding the roof to new postholes orientations (Shafer 1987:30-33). During the renovation episodes for Room 39, an additional center post to support the roof was added, and a door to access Room 79 was also made (Shafer 1987:33-37). Lastly, Classic Room 39 was remodeled perhaps to the greatest extent; the north wall was reinforced until the wall became five course thick, a vent was closed off, and a door to Room 78 was made (Shafer 1986:26-29).

Overall, much effort was exerted to keep a few Rooms such as 39 and 58 in the South and East room block respectively functional over many generations of use. While all room blocks quantifiably exhibited similar evidence of remodeling, it is clear that a few specific spaces were more important than others as evidenced by the work done to alter those built spaces. Most of the remodeling took place during the Classic period although earlier structures were remodeled at each of the room blocks.

Galaz. Apparent in Figure 6.11, only nine structures contained evidence of extensive remodeling at Galaz, and of those nine all but two were pithouses. Two were Georgetown structures and the remaining dated to the Three Circle phase. This indicates that more effort was exerted earlier than the Classic period to keep structures functional for the changing needs of the present. Further, the other non-pithouses were Classic Kiva 107 and Classic Corporate Kiva 15, suggesting than in the off chance that Classic rooms were renovated it was mostly likely due to their function and the importance they played for certain corporate groups or the community at large. Spatially, each room block contains structure that present remodeling activities,

and a chi-square test of the relative presence or absence of remodeling seen in Table 6.12, indicates no statistical significance in the room blocks (χ=0.894, p=0.640). Stated another way, no room block appears to have more remodeled rooms relative to the other contemporaneous room blocks. As no significant differences were noted when all the room blocks were compared, and because of the low counts, I did not conduct pairwise chi-square tests between each room block set. That said, I will now discuss the qualitative differences in the ages and functions of the remodeled rooms between the room blocks.

Table 6.12. Frequencies of the Relative Presence and Absence of Structure Remodeling for Room Blocks at Galaz. The absent column also contains rooms with no available data on remodeling.

Room Block	**Remodeling Present**	**Remodeling Absent**	**Total Structures**
North	2	56	58
Southeast	3	57	60
Southwest	3	50	54
Totals	8	167	172

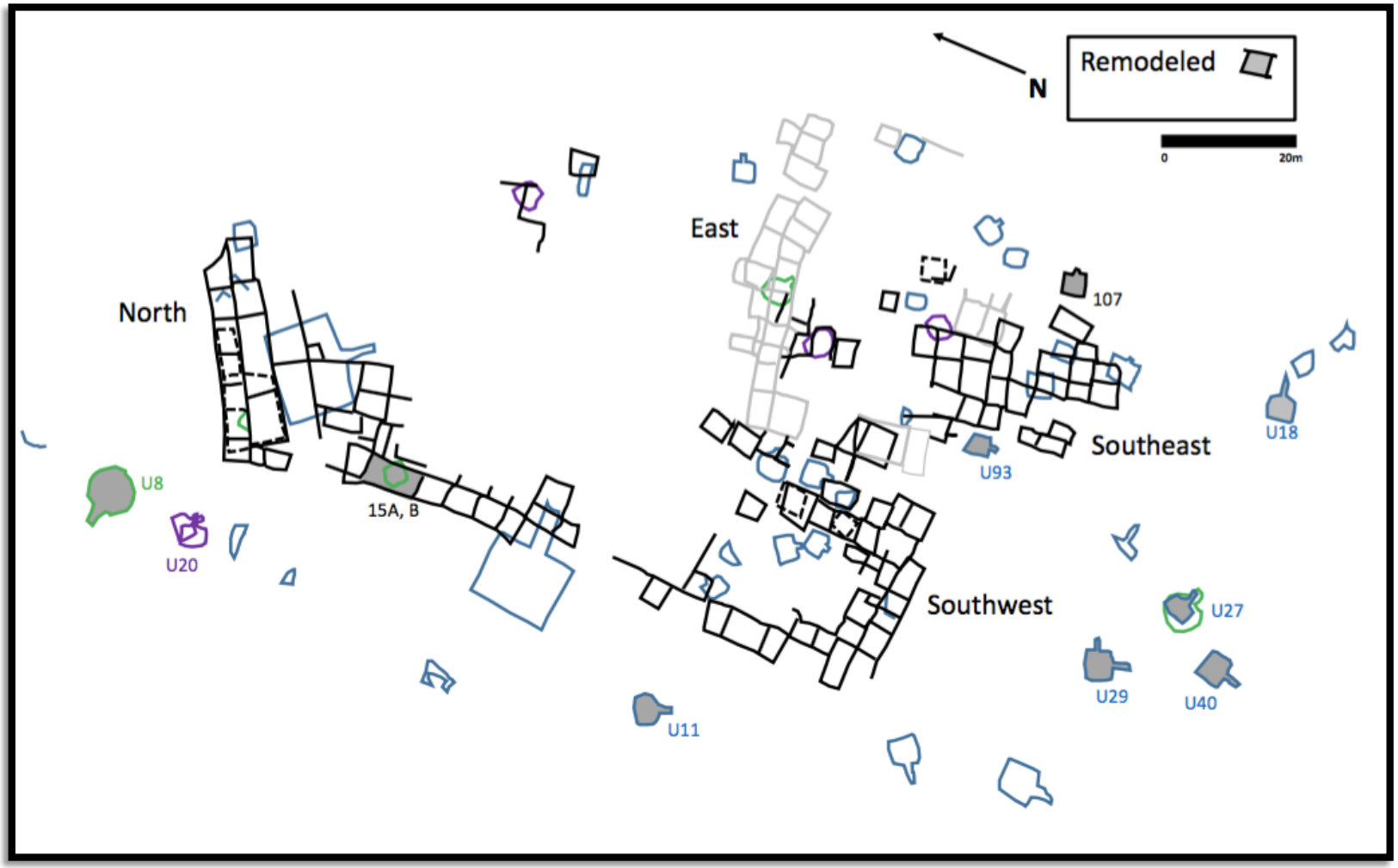

Figure 6.11. Map of Galaz rooms with evidence of remodeling. Rooms with remodeling are shaded and numbered. Green represents Georgetown age structures (A.D. 550-650), San Francisco phase structures (A.D. 650-750) are outlined in purple, Three Circle phase (A.D. 750-900, is blue, (Classic (A.D. 1000-1130) is black, and Postclassic (A.D. 1130-1350) is shown in gray.

Two Georgetown structures in the North room were remodeled. Pithouse 15 had a second rampway added and the first blocked and inhabitants of the possibly ceremonially used Pithouse 8 repositioned the roof and central post hole (Anyon and LeBlanc 1984:44,115). The only other remodeled room belonging to this room block was Room 15 which superimposed and encompassed earlier Pithouse 15. The renovations consisted of blocking a doorway and construction the elaborate upper floor discussed in the previous flooring section (Anyon and LeBlanc 1984:105).

For the Southeast room block, Pithouses 18 and 93 had their rooms redone as indicated by the repositioning of the central posts and hearths (Anyon and LeBlanc 1984:49). Pithouse 18 also had its upper floor filled and leveled off after the roof renovations were completed. Classic Kiva 107 had two phases of remodeling with the first more extensive than the latter. The floor, vents, and hearth were all remodeled during the first phase (Anyon and LeBlanc 1984:135). Great effort was spent on keeping this particular space functional, as it was one of the few places that contained more than one phase of remodeling.

In the Southwest room block, the only remodeled structures are Three Circle phase pithouses. Pithouse 40, had its floor and hearth remodeled, and Pithouse 29 had its entrance redone and the old blocked maybe a decade after the construction around A.D. 870 (Anyon and LeBlanc 1984:72). Pithouse 27 is both an example of superposition and remodeling. It is included in the present analysis because 27b is entirely within the walls of the previous pithouse and much effort was exerted to clean out the fill and erect the later pithouse. It resembles other instances of remodeling in

that both of the pithouses have entrances facing the same direction and many original postholes are used to support the later roof (Anyon and LeBlanc 1984:66). Thus, because the structures share many internal characteristics they are more akin to remodeling, and though they date to different architectural phases, it is clear the same group built both structures.

In sum, remodeling is not the most common architectural practice at Galaz, and mostly occurred during the Georgetown and Three Circle phases. Pithouse longevity through remodeling may have increased through time (Anyon and LeBlanc 1984:92). Each room block exhibits some form of remodeling and some and there are no statistically significant differences between the room blocks. Some qualitative differences are observable for each of the room blocks. The North contains the earliest remodeled structures and two superimposed structures both of which had been remodeled. Like Classic Kiva 107, two of the structures in the North room block might have been used communally or ceremonially by the lineage that dwelled in that room block. Again, ceremonial importance appears to have played a role during the Classic and perhaps before concerning whether a structure is remodeled or not. Lastly, the Southwest room block contains a Three Circle structure with abundantly clear association with the much earlier Georgetown structure and the sharing of postholes suggests an intimacy only perhaps Room 15 in the North room block can match.

Mattocks. There is not much or really any information regarding the practice of remodeling for the 300s room block nor Nesbitt's Southeastern group at Mattocks. I

documented only a few examples of rooms presenting evidence of remodeling (n=9). Both of the Three Circle phase pithouses were remodeled and seven Classic rooms belonging to the 200s and 400s room blocks also presented evidence of remodeling. Thus, remodeling was practiced continually at the site except for during its earliest occupation as there is no evidence that inhabitants altered Georgetown Structure 80b.

As seen in Table 6.13 and Figure 6.12, most structures are without remodeling, and each of the room blocks contained at least one remodeled room, with the 400s having slightly higher frequencies of remodeling of Classic rooms. When comparing all instances of remodeling listed in Table 6.13, there do seem to be statistically significant differences between room blocks (χ=18.928, p=0.008). Pairwise Pearson chi-square comparisons between the 400s and the 100s (χ=7.679, p=0.006), 200s (χ=6.000, p=0.014), 300s (χ=8.800, p=0.003), and Southeast room blocks (χ=4.800, p=0.029) likewise demonstrated significant differences. Fischer's Exact Two-Tailed Tests probability scores of (p=0.009, 0.036, 0.004, 0.037 respectively) indicated that the 400s is more likely to contain rooms with remodeling than the other room blocks.

Room 115a contained a vent converted to a doorway and new hearth which replaced the earlier one that was plastered over (Gilman and LeBlanc 2017:162). Both Rooms 286 and 41 were extensively remodeled, and the early non-cutting date for Room 232 may also suggest remodeling of another room in the 200s room block (Gilman and LeBlanc 2017:193). Various levels of remodeling are recorded for the 400s room block. Rooms 426 and 433 were possibly remodeled due to late non-cutting dates from roof timbers that post-date A.D. 1100 (57, 267). Classic Pithouse

410 has more extensive remodeling with a ramp that was blocked and a second hearth and vent added (Gilman and LeBlanc 2017:115) during its use during the Classic. Unit 435 was also remodeled relatively late, after A.D. 1100 and had a new floor from ramada, and a doorway remodeled twice, once from door to vent then back to small door (Gilman and LeBlanc 2017:219, 266). Unit 438's central post hole and floor was remodeled evidenced by plastered post-holes indicative of altered roof supports (Gilman and LeBlanc 2017:236) Lastly, Room 431 had a wall repair where three posts were removed and plastered over (Gilman and LeBlanc 2017:271).

In short, each room block contained remodeling and most of this activity occurred during the Classic period. Remodeling varied from not very extensive to significant and most of this was related to household repair. Pairwise comparisons indicate that remodeling was most common for the 400s room block.

Table 6.13. Frequencies of the Relative Presence and Absence of Structure Remodeling for Room Blocks at Mattocks. The absent column also contains rooms with no available data on remodeling.

Room Block	Remodeling Present	Remodeling Absent	Total Structures
100s	1	22	23
200s	2	23	25
300s	0	18	18
400s	6	9	15
Southeast	0	9	9
Totals	9	81	90

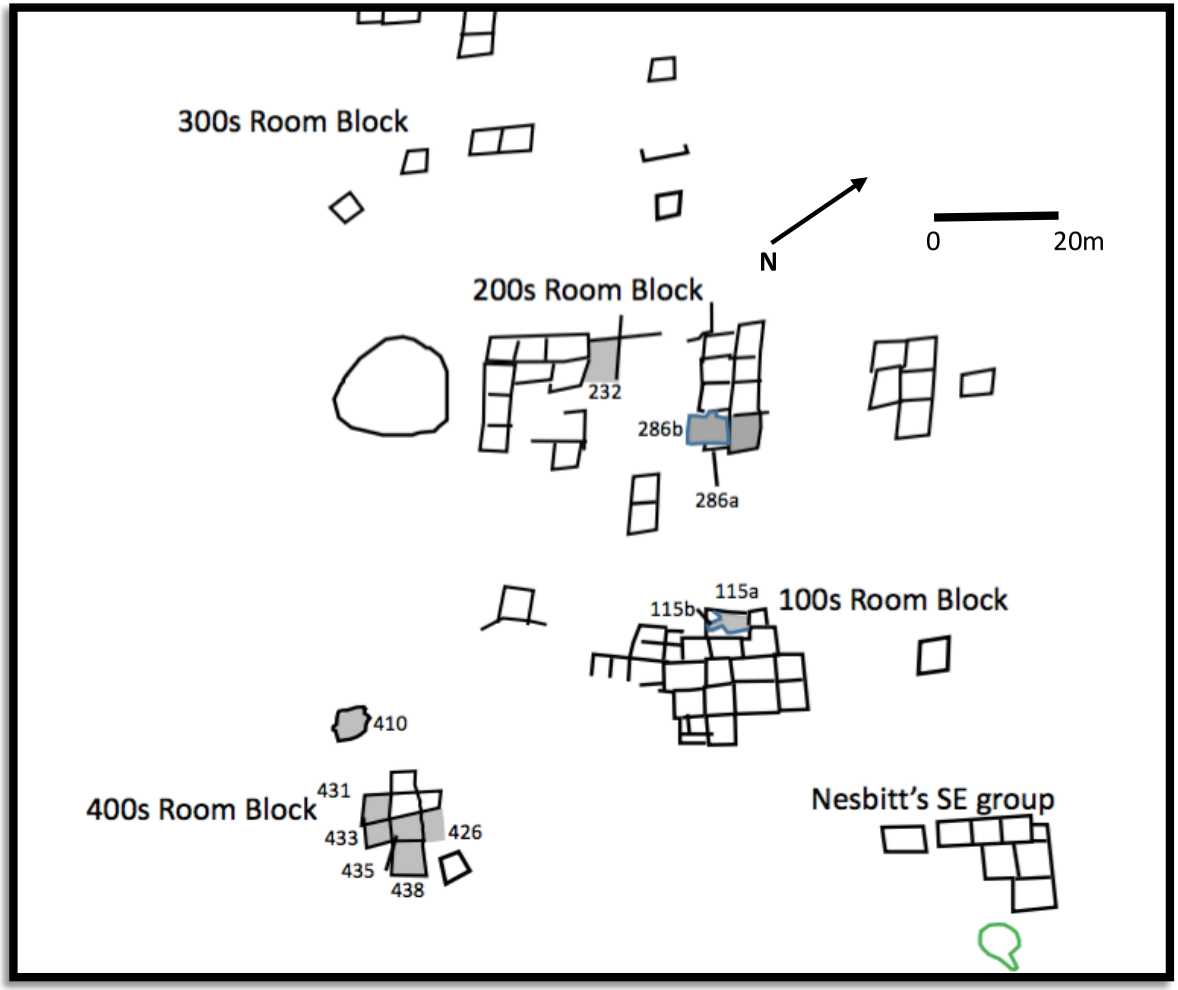

Figure 6.12. Map of Mattocks rooms with evidence of remodeling. Rooms with remodeling are shaded and numbered. Structures outlined in green date to the Georgetown phases (A.S. 550-650), Three Circle phase (A.D. 750-900) structures are outlined in blue, and Classic (A.D. 1000-1130) are shown in black.

Post-abandonment trash and room/pithouse filling

Here a distinction needs to be made between trash wash or dumped in after a roof has collapsed and the structure is abandoned, and trash being used to fill a surface to a certain level for later floor or structure construction. The former is a practical outcome of refuse cleaning from currently lived in areas and may denote forgetting more than remembering. An abandoned room or pithouse is no longer useful to the living except as a place to dispose of domestic trash. The latter option suggests that trash is used to ensure and maintain continuity in structures and space, and most likely signifies memory maintenance. In the Maya region, it is quite common for inhabitants to recycle trashy fill in episodes of platform expansions (McAnany and Hodder 2009:11). In a sense places are filled to seal with a concern for maintaining continuity as opposed to razing in order to construct later structures.

Technically, both obscure the visibility of a previously abandoned surface, but trash added to fill for future construction needs is but one step in a chain of continuous actions, whereas trash in abandoned rooms is most likely the final stage and function of those built spaces. The timing of the deposition of trash is the most important defining characteristic. Either it is soon after abandonment or it is long after the room fell into disuse and the roof collapsed. Like other post-abandonment depositional activities discussed below in the cutting section, we can assess original or altered significances (as may be the case with forgetting) of previous structures.

NAN Ranch. The presence of trash or intramural rooms being used as middens at NAN Ranch is pretty ubiquitous and often not considered to be important enough to closely detail. Rooms 14, 37, 40, 55, and 60 in the East room block are the only explicit descriptions of post-abandonment midden deposits in rooms (Figure 6.13). Thus, refuse disposal without subsequent building in mind will not be discussed further.

There are only four structures described by Shafer as being filled with midden materials deposited after abandonment, whether it was to seal over and forget or to make ready for later superimposed architecture. All four of the filling instances occurred in the East room block. One consisted of the filling with midden debris of Three Circle Pithouse 113 in the eastern plaza area. Trashy fill between and to build up room floors are apt designations for the remaining three. This may suggest differences with regards to filling and abandonment between room blocks. However, based on the small counts of rooms with trash listed in Table 6.14, a chi-square test to identify differences between room blocks was not performed and the above statement is not quantified.

Table 6.14. Frequencies of Structures Used as Trash Dumps or to Build up Floors after Abandonment at NAN Ranch.

Room Block	**Trash Present**
East	6
South	0
Southeast	0
Totals	6

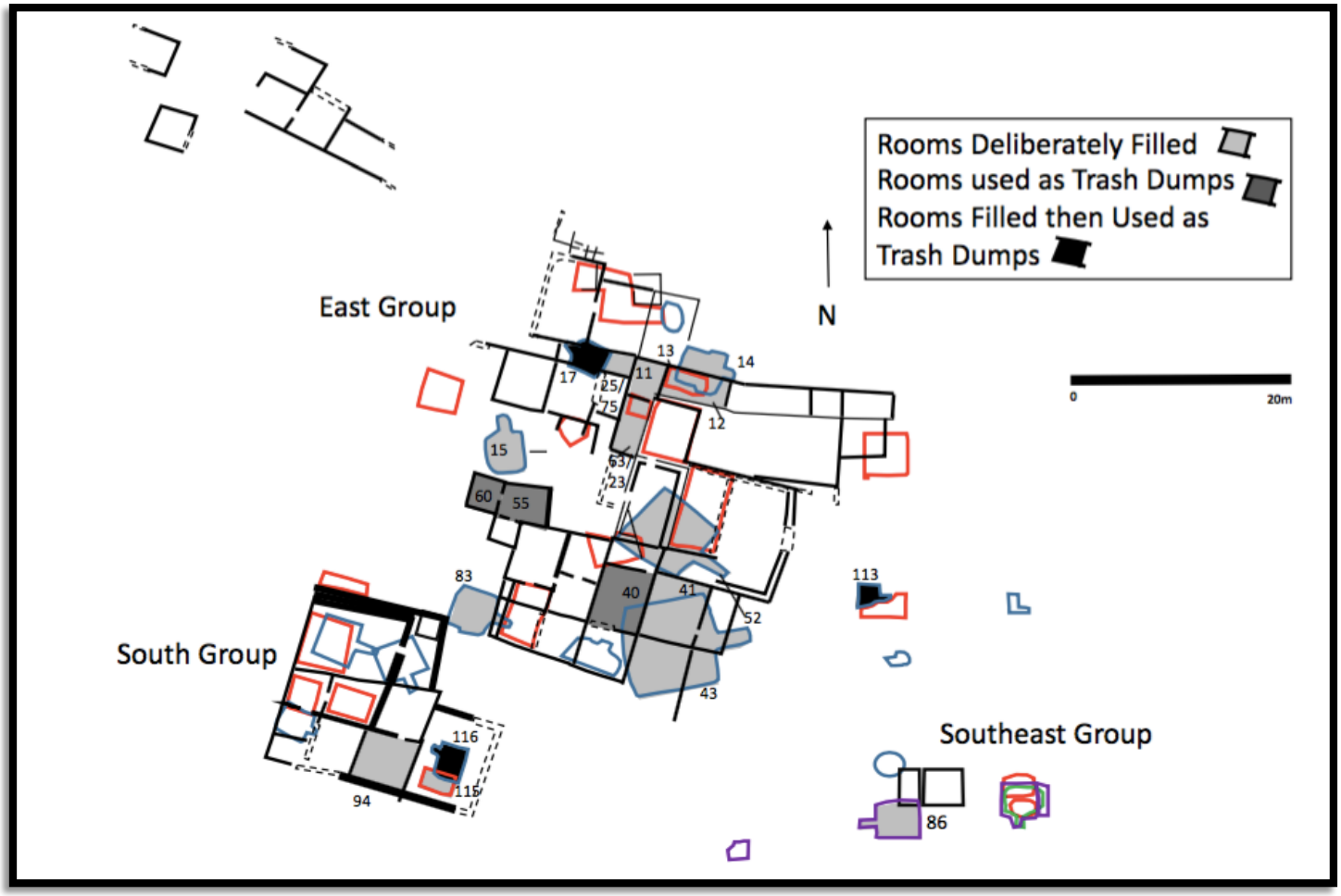

Figure 6.13. Map of NAN Ranch rooms with post-abandonment trash, fill, or rooms used as extensive trash dumps. Structures outlined in green date to the Georgetown phases (A.S. 550-650, purple defines San Francisco phase structures (A.D. 650-750), Three Circle phase (A.D. 750-900) structures are outlined in blue, Transitional (A.D. 900-1000) are shown in red, and Classic (A.D. 1000-1130) are shown in black.

Galaz. While Anyon and LeBlanc (1984:31) often noted many mixed deposits containing trash and refuse at Galaz. Indeed, while there was no communal trash dump per se, some pithouse depressions and a few pueblo rooms were used after abandonment as refuse areas for Classic and Postclassic inhabitants. As Table 6.14 and Figure 6.14 illustrate, all three room blocks contained areas of trash disposal, and the Southwest room block had the highest frequencies of recorded Classic trash deposits. However, when I performed a chi-square test for all room blocks on the data in Table 6.15, it resulted in no significant differences (χ=3.60, p=0.165). Pairwise comparisons between room block likewise resulted in no statistically significant differences, except between the North and Southeast room blocks (χ=4.000, p=0.045), although the test is subject due to low expected cell counts. Thus, the absence of an extensive trash dump in the North room block caused it to vary significantly from the Southeast where one is present.

Pithouses especially Three Circle pithouses were the most common locations for disposal of Classic refuse. Pithouses 29 and 40 were used as trash dumps almost immediately after they were abandoned and burned (Anyon and LeBlanc 1984:76). Rooms 45 and 72 contained some Postclassic refuse on the floor and most likely was the result of the later occupation or reoccupation of those Rooms in the North room block. Similarly, Room 110 contained evidence of Postclassic ceramic and other debris. In sum, depositing household trash was most common during the Classic in earlier pithouse depressions in the Southwest part of the site, and the North and Southeast

room blocks vary significantly in the presence and absence of extensive trash dumps with them being absent in the former.

Many rooms are deliberately filled in after they are abandoned (Figure 6.15). The North and the Southwest room block have roughly similar frequencies of filled in rooms. All three room blocks contain pithouses and pueblo rooms alike that have been filled. In sum, placing Classic trash into earlier pithouse depressions by inhabitants was quite common at Galaz. All three room blocks contain areas of refuse disposal, but the absence of extensive trash dumps in the North room block resulted in a significant difference between it and the Southeast room block.

Table 6.15. Frequencies of Structures Used as Trash Dump Areas after Abandonment at Galaz.

Room Block	**Trash after Abandonment**	**Extensive Trash Dump**	**Filled**	**Totals**
North	3	0	6	9
Southeast	0	1	2	3
Southwest	3	2	7	12
Totals	6	3	15	24

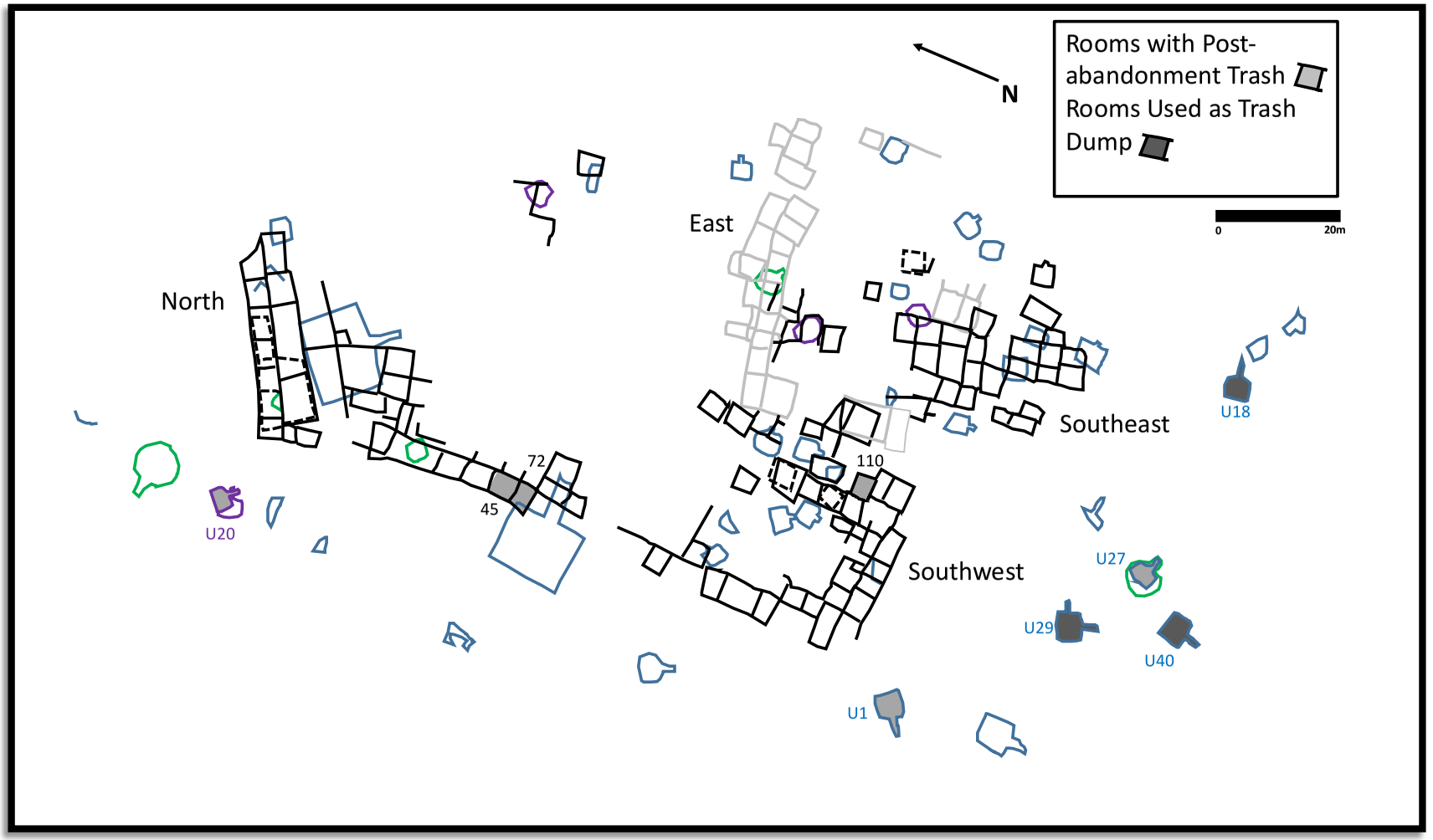

Figure 6.14. Map of Galaz rooms with post-abandonment trash or rooms used as extensive trash dumps. Green represents Georgetown age structures (A.D. 550-650), San Francisco phase structures (A.D. 650-750) are outlined in purple, Three Circle phase (A.D. 750-900, is blue, (Classic (A.D. 1000-1130) is black, and Postclassic (A.D. 1130-1350) is shown in gray.

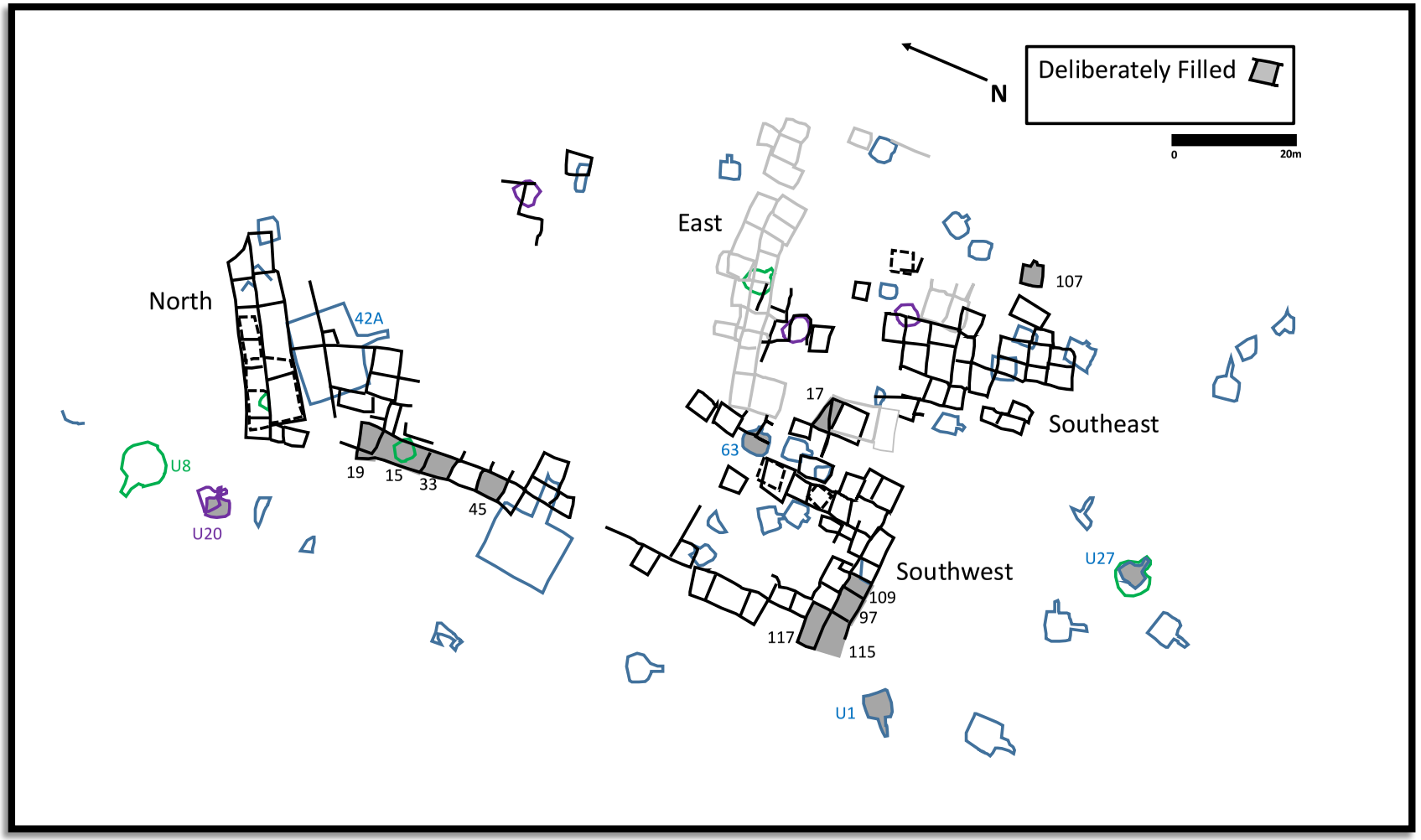

Figure 6.15. Map of Galaz rooms that are deliberately filled. Filled rooms are shaded and numbered. Green represents Georgetown age structures (A.D. 550-650), San Francisco phase structures (A.D. 650-750) are outlined in purple, Three Circle phase (A.D. 750-900, is blue, (Classic (A.D. 1000-1130) is black, and Postclassic (A.D. 1130-1350) is shown in gray.

Mattocks. Few abandoned rooms and pithouses at Mattocks did not contain trash. The Great Kiva 213 was not used as a trash dump at any time despite the close proximity of the depression to a large Classic room block. This suggests that the significance of the structure and its history precluded its use as a disposal area. Other structures at Mattocks can be conceptualized in a similar significant manner due to the lack of trash, or presence of trash to obtain a level surface for future construction. These latter included; Rooms 80b, 106, 114, 115, 286b, 426, 431, 438 from the Southeast, 100s, 200s, and 400s room blocks respectively (Figure 6.16).

Little differences occur between room blocks with regard to the amount of trash or purposes for its placement (Table 6.16). All room blocks contain refuse in the post-abandonment fill above rooffall and based on the data in Table 6.16, there are no statistically significant differences between the room blocks (χ=8.650, p=0.373). With the exception of Kiva 213, all of the remaining three pithouses are filled by trash prior to Classic construction of superimposed pueblo rooms or extramural activity areas (80b). Inhabitants had little to do with Georgetown Structure 80b, until sometime after A.D. 935 when trash was used to fill the depression above the rooffall. Interestingly, this trash consisted of ceramic vessel sherds of both Late Pithouse (Boldface and Transitional) and Early Classic painted styles. Instead of obscuring the past structure, the refuse of different time periods added to the sense of continuity at this particular place on the landscape. The situation of Pithouse 286b mirrors that of 80b above, with the sole exception that the filling took place shortly after the room burned and the roof collapsed. The remaining rooms contained trash to level out

superimposed floors. Room 441 was a late Classic room abandoned during construction and was filled in with no intention of building over it.

Unit 286b was likely closed and burned in much the same way a Great Kiva would have been in the Late Late Pithouse period (Gilman and LeBlanc 2017:463). Among the closing offerings found in the rooffall were Boldface, Transitional, and Early and Middle Classic vessel fragments, suggesting that people were symbolizing their long-term connection with this building and the founding family.

To summarize, post-abandonment trash was commonly deposited during the Classic period into the few pithouses present, most-often as part of the deliberate filling in of structures. Each room block contains rooms with trash and do not vary significantly from each other in this regard.

Table 6.16. Presence and Type of Midden Fill after Room Abandonment at Mattocks. Some rooms have no data associated with them and are therefore not represented in the table.

Room Block	Trash after Abandonment	Trash to Build up	No Trash	Total Structures
100s	5	3	0	8
200s	3	2	2	7
300s	1	0	0	1
400s	6	2	0	8
Southeast	0	1	0	1
Totals	15	8	2	25

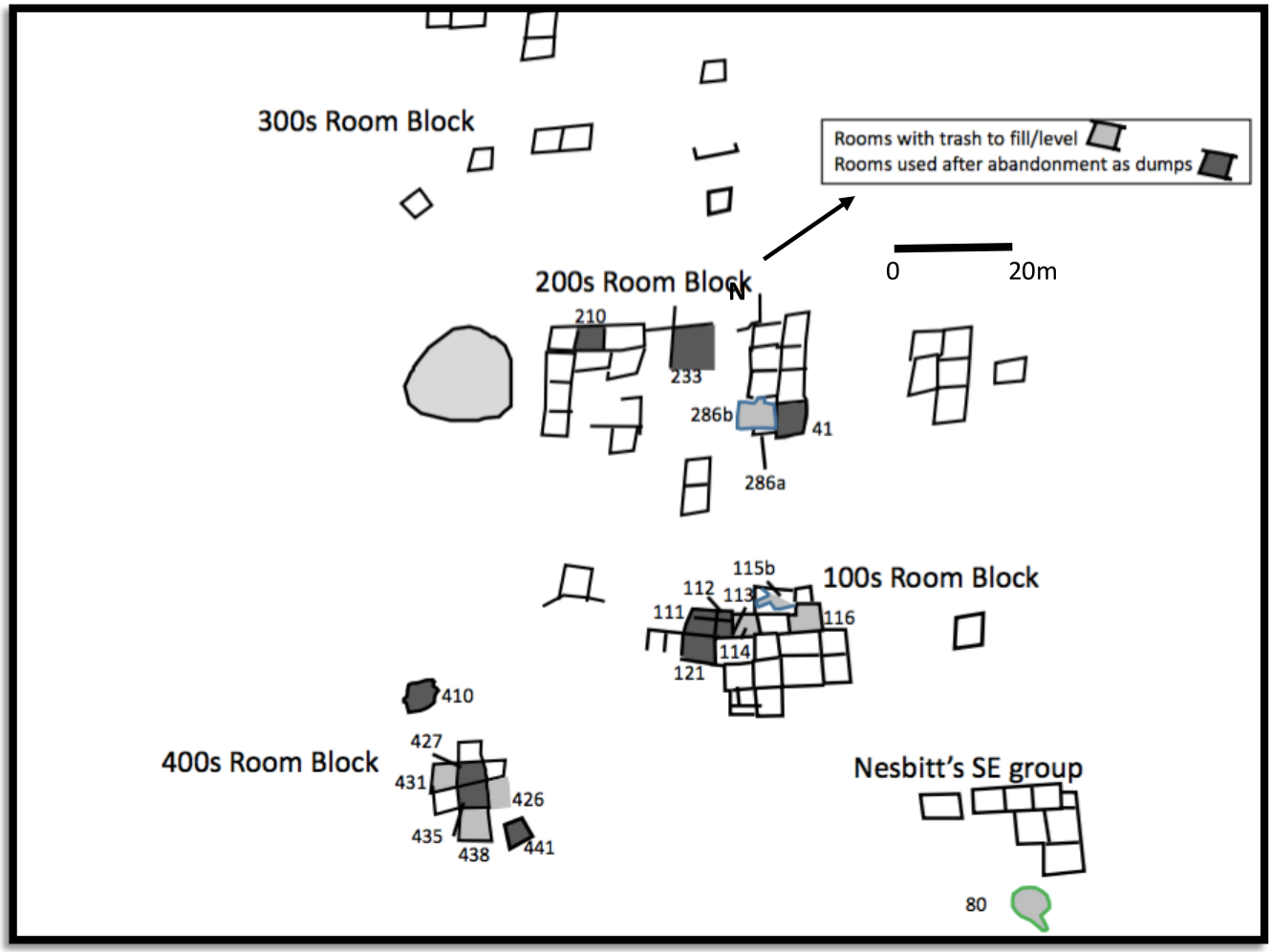

Figure 6.16. Map of Mattocks rooms with post-abandonment trash, trash till between floors, or rooms used as extensive trash dumps. Structures outlined in green date to the Georgetown phases (A.S. 550-650), Three Circle phase (A.D. 750-900) structures are outlined in blue, and Classic (A.D. 1000-1130) are shown in black.

Cutting of Existing Sequences

Whether to obscure the past or to make room for new structures and activities on top of the ruins of older built places, cutting through razing, scouring, burning, and salvaging are additional and interconnected processes related to memory and termination. I discuss cutting behaviors in order of most destructive to least destructive (removing of construction materials). At times, it is difficult to ascertain if a specific activity or sequence of activities represented forgetting or memory maintenance. Abandonment (burning, and removing timbers) and post-abandonment activities (removing wall cobbles and razing) are examined to elucidate if and how certain formerly occupied places change in significance. In essence, do they continue to be places of future activity, special or mundane, or are they later ignored, removed, and forgotten by the wayside?

Razing and scouring of earlier structures, floors, or walls

While most likely a common result from the practice of architectural superposition, I now turn to examine the presence and absence of instances of structure razing and scouring. Perhaps the most obvious form of cutting, scouring (partial removal) and razing or entirely destroying an earlier structure ruin in an effort to build over them can be interpreted as erasure and forgetting or as remembering (McAnany and Hodder 2009:10). It is equally important to see what is being destroyed to make way for the new and what material remains of the past are just being covered up and somewhat preserved.

NAN Ranch. Twenty-one cases of razed or destroyed floors are displayed in Table 6.17 for NAN Ranch. Many of the early pithouses were razed in the Southeastern room block, but the majority of the razing and removing of structures was performed on Transitional rooms underlying later Classic rooms (Table 6.18). A few Classic rooms are also destroyed by later room occupations within the same walls, such as Room 23b. Many transitional structures are only identifiable by patches of plastered floors or wall bases and many were destroyed by late pueblo room construction in situ development (Shafer 2003:43). Spatially, each room block illustrates at least one episode of structure removal (Figure 6.17), and a chi-square test based on the presence and absence ratio detailed in Table 6.17, suggest no statistically significant differences between room blocks (χ=1.786, p=0.409). Likewise, pairwise comparisons between the East and South (χ=0.711, p=0.399), East and Southeast (χ=0.766, p=0.382), and South and Southeast (χ=1.666, p=0.197) room blocks indicate no statistically significant differences.

Table 6.17. Frequencies of Razing for Room Blocks at NAN Ranch.

Room Block	**Razing/Destroying Present**	**Razing/Destroying Absent**	**Total Structures**
East	13	46	59
South	6	13	19
Southeast	2	8	10
Totals	21	67	88

Table 6.18. Dates of the Rooms Razed at NAN Ranch.

Room Block	Georgetown Razed	San Francisco Razed	Three Circle Razed	Transitional Razed	Classic Razed	Totals
East	0	0	1	8	4	13
South	0	0	2	4	0	6
Southeast	1	1	0	0	0	2
Totals	1	1	3	12	4	21

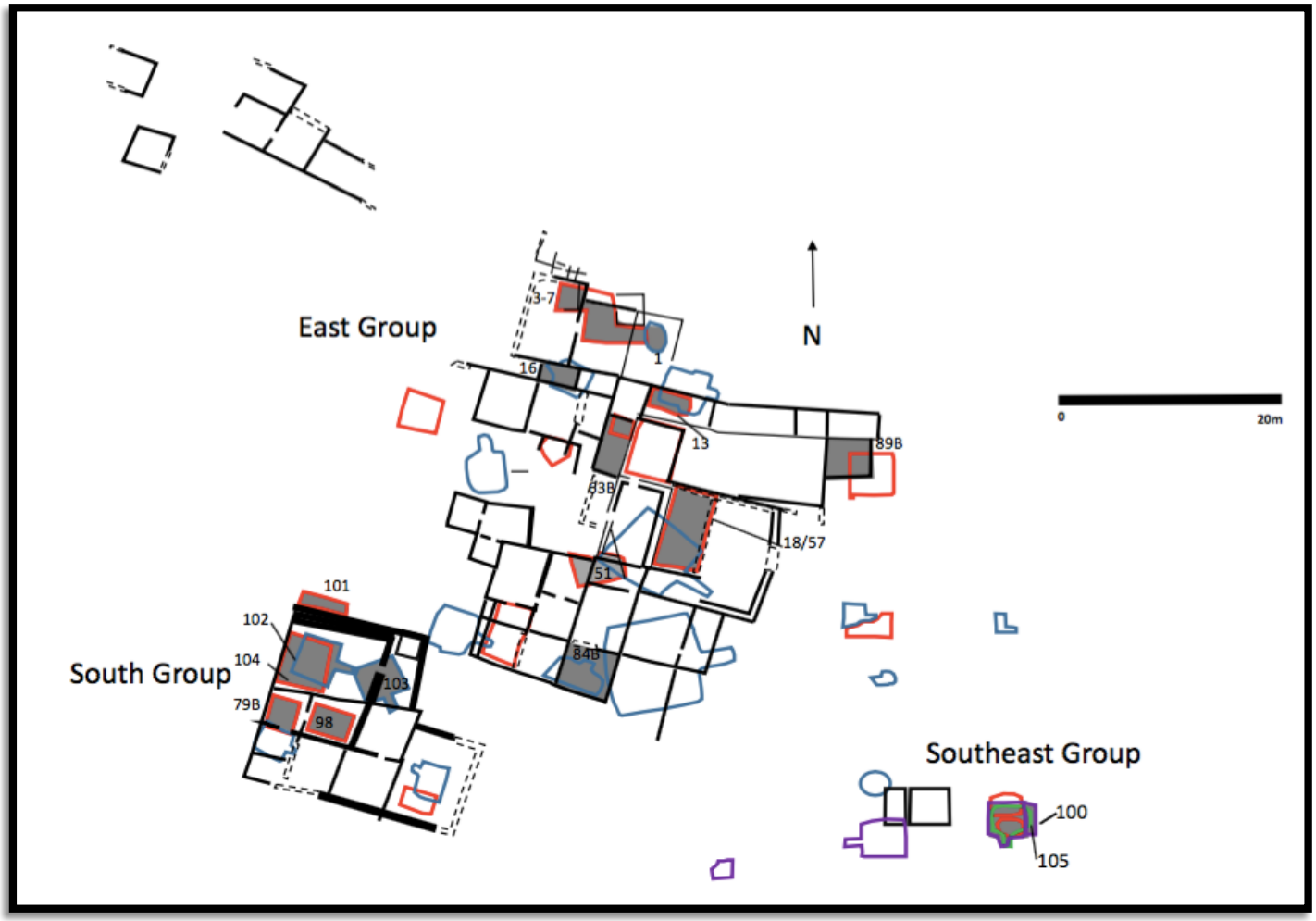

Figure 6.17. Map of Locations of razed or scoured structures at NAN Ranch. Razed structures are shaded and numbered. Structures outlined in green date to the Georgetown phases (A.S. 550-650, purple defines San Francisco phase structures (A.D. 650-750), Three Circle phase (A.D. 750-900) structures are outlined in blue, Transitional (A.D. 900-1000) are shown in red, and Classic (A.D. 1000-1130) are shown in black.

Due to the superpositioning and sandwiching of many structures of different phases, razing is expected for the Southeast room block. Georgetown Pithouse 105 was truncated by later Pithouse 100, both the east and north wall limits were the same as Room 105 but the original pit was enlarged to accommodate the rectangular and straight walls of the later structure. Late San Francisco Pithouse 95 cut into ruins of Pithouses 100 and 105 thereby destroying approximately half of Pithouse 100 and the west side of 105 (Shafer 2003:27-28).

To review, while some pithouses are razed and destroyed, notably those in the Southeast portion of the site, many are of Transitional age. All room blocks contained some rooms that were razed or partially destroyed by later Transitional or Classic period construction activities, and there are no statistically significant differences among room blocks concerning the frequencies of razing earlier structure walls or floors.

Galaz. Few structures are explicitly described as being razed or destroyed by later superimposed structures at Galaz. As such they are mapped in Figure 6.18 and quickly described. Early Classic core Rooms 70A and 76B had their walls dismantled and their floors partially razed, although some wall alignment was maintained in later constructions (Anyon and LeBlanc 1984:101). As Figure 6.17 shows, both of these rooms are within the confines of the Southeast room block. Pithouse 27's (not mapped) lower floor may have been razed as it was not detected below the upper floor. In general, Anyon and LeBlanc (1984: 108) only state in passing that the lower floors of many remodeled structures were destroyed by the construction of later

rooms and floors. Thus, it is safe to assume that some of the structures discussed above in the remodeling and multiple floors section (See Figures 6.8 and 6.11) also fall under this index but as it is not possible to delineate which ones I will not discuss razing any further for Galaz.

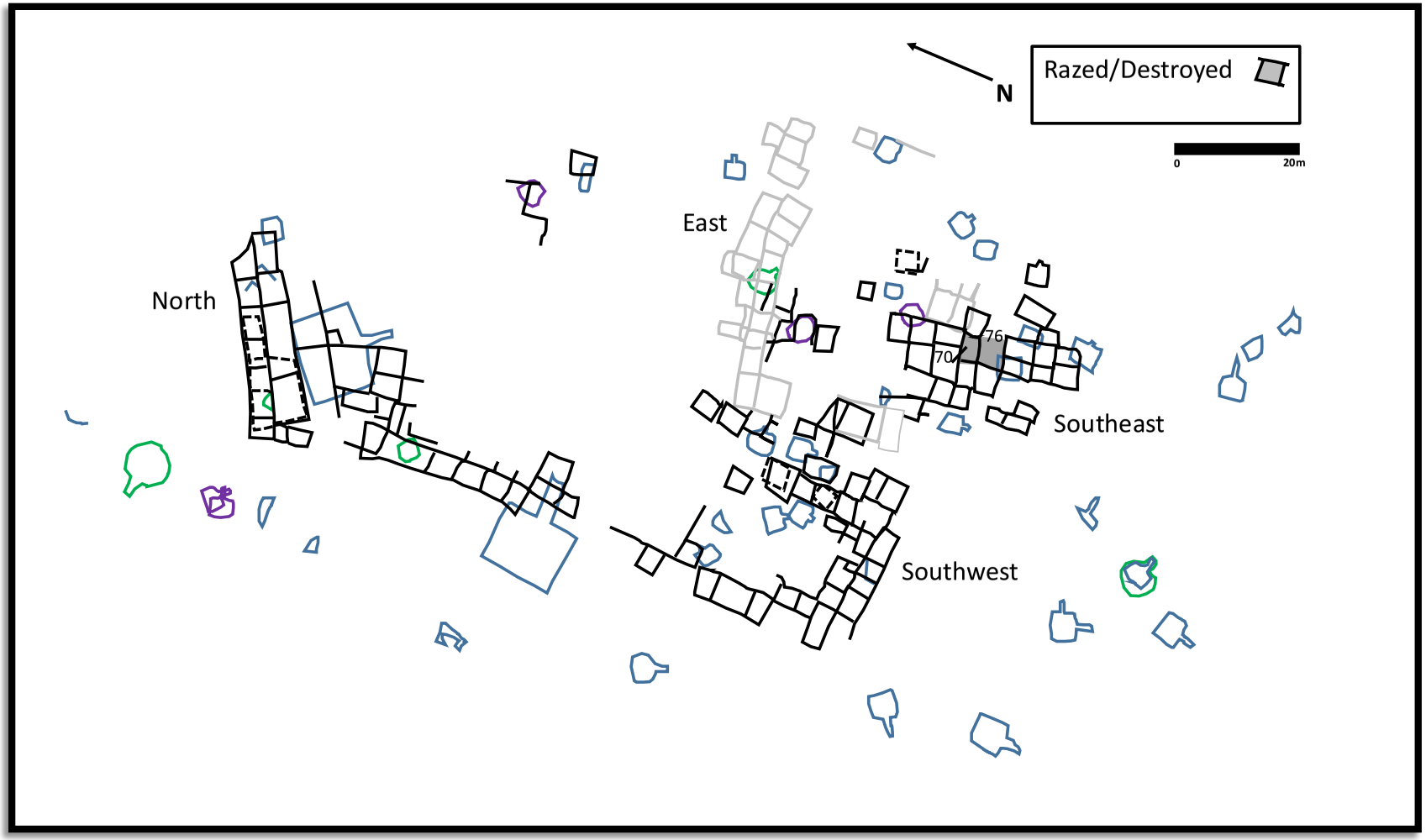

Figure 6.18. Map of locations of razed or scoured structures at Galaz. Razed structures are shaded and numbered. Green represents Georgetown age structures (A.D. 550-650), San Francisco phase structures (A.D. 650-750) are outlined in purple, Three Circle phase (A.D. 750-900, is blue, (Classic (A.D. 1000-1130) is black, and Postclassic (A.D. 1130-1350) is shown in gray.

Mattocks. The only instance of seemingly intentional destruction of a lower structure or surface at Mattocks occurs during the Classic in the 200s room block. Room 41, described as a possible communal granary adjacent to Room 286a, contain a lower adobe floor that was in ancient times destroyed and only seen in a few patches (Gilman and LeBlanc 2017:138). It is superseded by a floor of flagstones laid after the walls were built, but the reason for the floor removal is currently unknown. It may have to do with retrieval of burials interred during the earliest use of that room.

Burning

While burning can be unintentional, it can also be a part of structure renewal or termination. In Neolithic Europe, burning was an intentional part of structure termination (Stevonavic 1997). The practice of burning a structure to close it and transform its use is a well-documented practice in the Mimbres region, first observed and most intense in the Late Pithouse period, but also fairly present during the Classic period (Creel and Anyon 2003; Shafer 2003). Creel and Anyon (2003) view many of the burnings of the Three Circle great kivas as closure of earlier and special or powerful places. Often times caches or dedicatory items, such as shell, turquoise, broken sherds or projectile points were placed on floor on in the roof prior to the burning. Burning can equally be a form of renewal for changing the function of the space or as a result of member death (McAnany and Hodder 2009). In general, I examine the presence or absence of burning for each room block at each site. In some cases, I distinguish between severely burned and partially burned structures. Most likely the severely burned structures were intentionally set. We can interpret burned structures as both

remembering and forgetting of sealing and of erasure. I would go a step further and argue that the act of burning creates a very visual and memorable event that is tied to a place, allowing it to be acted upon by future groups long after the burning took place.

NAN Ranch. Twenty-five total burned structures were reported and examined for NAN Ranch (Figure 6.19). Unlike the other sites, I did not have the detail necessary to break down the extensiveness of the burning. Only the presence of one fire for any floor or occupation of a room is counted in this tabulation. Floors of the same structure that burned more than once would have inflated the counts and are discussed separately in the text. The burning began in the Georgetown phase (n=1), continued during the San Francisco phase (n=2), Three Circle (n=4), and into the Transitional (n=4), and lastly sharply increasing during the Classic period (n=21). In terms of spatial distinctions in the frequencies of burnings among room blocks, no significant differences occurred according to the chi-square test performed on the data exhibited in Table 6.19 (χ=1.016, p=0.602). Likewise, pairwise comparisons resulted in no statistically significant differences between the East and South (χ=0.937, p=0.333), East and Southeast (χ=0.010, p=0.922), and South and Southeast room blocks (χ=0.491, p=0.483). Burning and possible retiring for both pithouses and later sunken or Classic rooms were fairly common for all three room blocks.

Table 6.19. Frequencies of Structure Burnings or Partial Burnings for Room Blocks at NAN Ranch. Some structures burned more than one during their use life but are only counted once in this table.

Room Block	Burned	Not Burned	Total Structures
East	20	39	59
South	9	10	19
Southeast	3	7	10
Totals	32	56	88

In the East room block, only one of the Three Circle phase Great Kivas burned (Shafer 2003:33). In the Southeast room block, all three of the burning events took place in the Pithouse period. Thus, burning was common early and not practiced by inhabitants after the San Francisco phase for this locale. From data present in Table 6.19, two pairwise chi-squares between the East and Southeast (χ=15.000, p=0.005), and South and Southeast (χ=12.000, p=0.018), indicate significant differences between the timings of the burning events. Interestingly, some of the rooms in the South room block may have burned more than once. Many rooms in south room block burned but were remodeled right after burning (ex. Room 28) suggesting that either the burnings were not intentional or were performed as a form of renewal or retirement and did not prevent future occupation. As Room 28 in the South room block was potentially occupied for 80 years (Shafer 2003:97), structure renewal for the difference life phases of the structure is not out of the question.

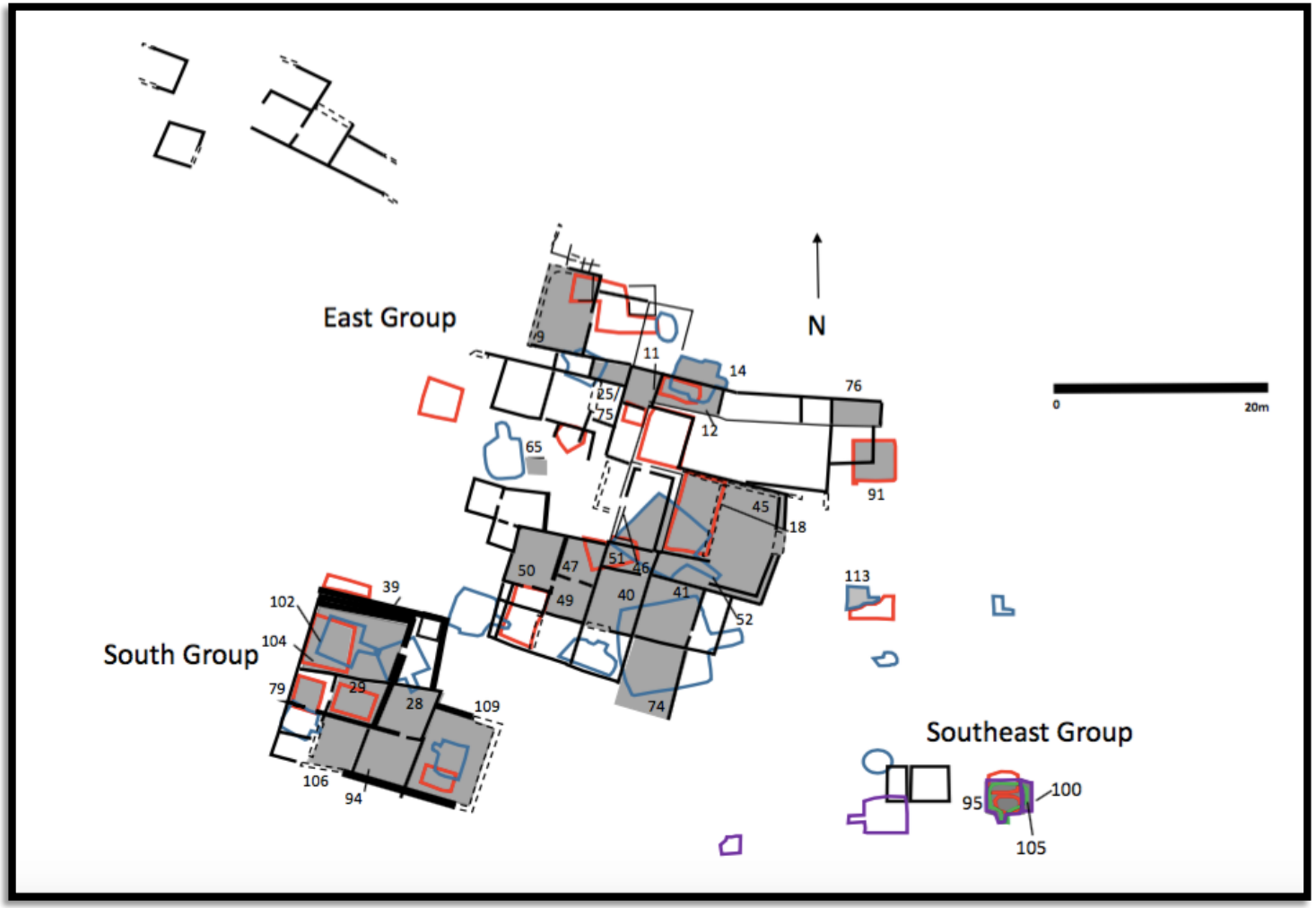

Figure 6.19. Map of locations of burned or partially burned structures at NAN Ranch. Structures outlined in green date to the Georgetown phases (A.S. 550-650, purple defines San Francisco phase structures (A.D. 650-750), Three Circle phase (A.D. 750-900) structures are outlined in blue, Transitional (A.D. 900-1000) are shown in red, and Classic (A.D. 1000-1130) are shown in black.

To quickly summarize, the burned structures started as early as the event that burned Georgetown Structure 105 and continued steadily into the Classic when the burnings of the majority of the structures took place. Each room block had a least one case of burning and no major differences in frequency occurred between the room blocks when all dates are considered. When ages of the structures are considered, the Southeast room block is significantly earlier in its burning traditions than the other room blocks.

Galaz. A total of 26 structures were at least partially burned at Galaz, many most likely the result of intentional action (Figure 6.20). Of those 26, 17 were pithouses, which suggests that the practice of burning a structure prior to abandonment as a termination ritual started early and continued into the Classic, although not as frequent. Often the rooms burned during the Late Late Pithouse period and the Classic period were ceremonial in nature. When we examine the spatial relationships of the burnings and consider the severity of the fires, patterns emerge between the room blocks. Although the data in present in Columns one, two and four in Table 6.20 did not result in statistically significant differences (χ=6.105, p=0.192), the North room block exhibited the greatest frequency of severely burned structures and the highest total of burned structures. Similarly, pairwise comparisons resulted in no statistically significant differences between the North and Southeast (χ=0.600, p=0.741), North and Southwest (χ=5.231, p=0.073), and Southeast and Southwest room blocks (χ=4.193, p=0.123).

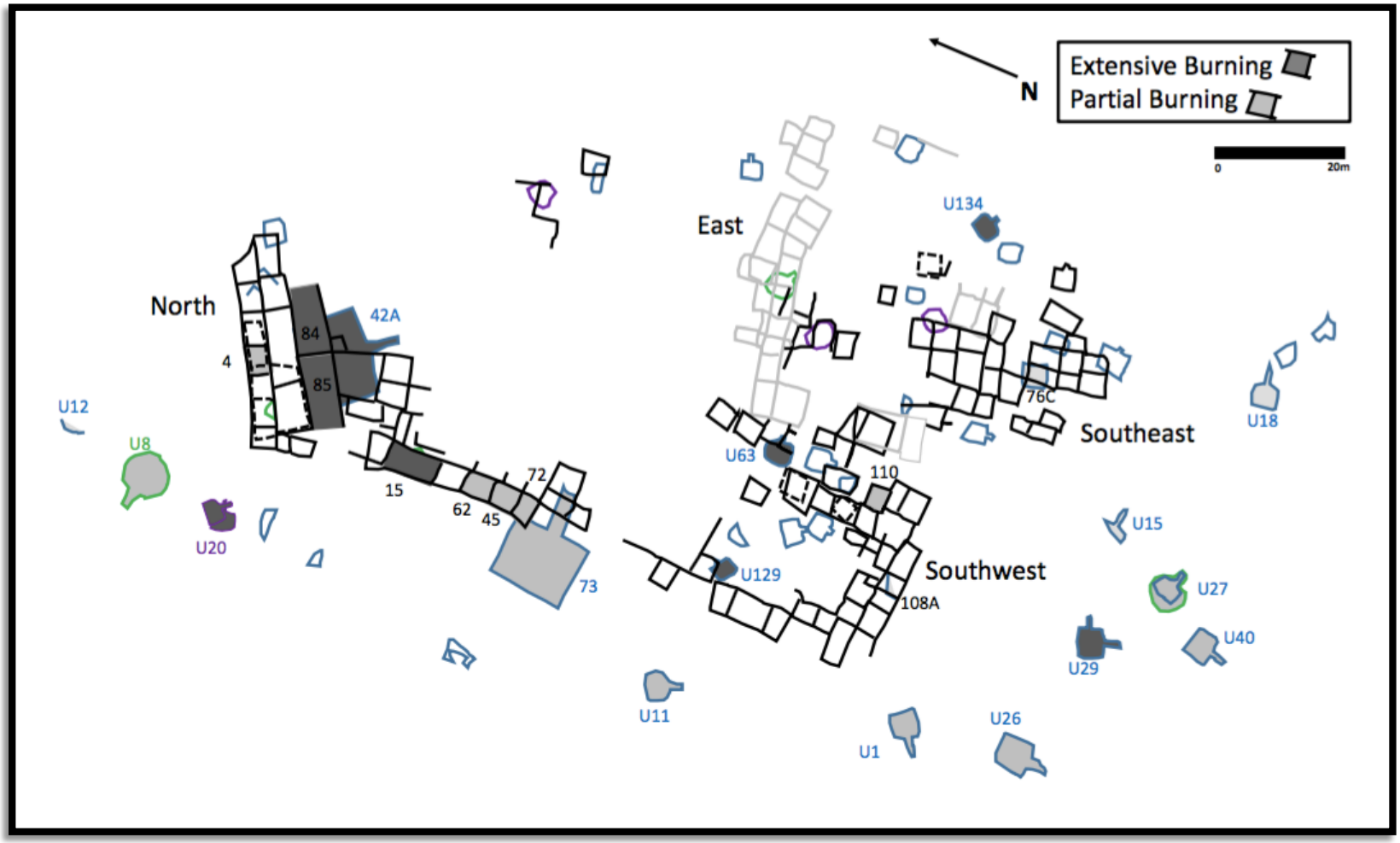

Figure 6.20. Map of locations of burned or partially burned structures at Galaz. Burned rooms are shaded and numbered. Green represents Georgetown age structures (A.D. 550-650), San Francisco phase structures (A.D. 650-750) are outlined in purple, Three Circle phase (A.D. 750-900, is blue, (Classic (A.D. 1000-1130) is black, and Postclassic (A.D. 1130-1350) is shown in gray.

Table 6.20. Frequencies of Structure Burnings or Partial Burnings for Room Blocks at Galaz. Columns marked with an asterisk were included in chi-square testing.

Room Block	Burned*	Partially Burned*	Total Burned	Not Burned*	Total Structures
North	5	7	12	46	58
Southeast	1	2	3	49	60
Southwest	3	8	11	51	54
Totals	9	17	26	146	172

A few structures do require mention here. First, in the North room block, four of the structures burned were of ceremonial in nature. Pithouse 8 possibly used as a communal space was burned. Both Three Circle Great Kivas 42A and 73 were burned although 42A was burned to a much greater extent. Anyon and LeBlanc (1984) also note that Room 15 possibly a corporate kiva burned extensively. The other non-ceremonial rooms to burn in this room block were the rooms directly over Great Kiva 42A, and the superimposed San Francisco Pithouse 20. The Southeast room block had the fewest instances of burning, and it is surprising that Classic Kiva 107 was left fallow instead of burned as part of the decommissioning process. With the second most burned structures, more than half of the Three Circle pithouses in the Southwestern group were burned, including remodeled pithouse 29 which burned extensively.

To quickly summarize, many pithouses, pithouses and Classic rooms were burned most likely as part of a termination or retirement sequence. Overall, the North room block contained the highest frequency of burned and partially burned structures, but no statistically significant differences in burning frequency occurred between room blocks.

Mattocks. Gilman and LeBlanc (2017) reported only ten instances of burnings for the Mattocks site (Table 6.21, Figure 6.21). Two of the four pithouses burned including Pithouse 286b and Great Kiva 213. Single Georgetown Pithouse 80b belonging to Nesbitt's Southeast group did not burn (Gilman and LeBlanc 2017:99), and neither did Pithouse 115b although the superimposed pueblo Room 115a did. The frequency of burning was slightly increased in intensity and frequency from the Late Pithouse to the Classic period. All room blocks contained at least one burned structure, except for the Southeast and 300s room blocks, of which we have little information (Gilman and LeBlanc 2017). A chi-square test based on data listed in Table 6.21 resulted in no significant differences between room blocks (χ=14.250, p=0.076).

Table 6.21. Frequencies of Structure Burnings or Partial Burnings for Room Block at Mattocks. The counts are too small to conduct a pair-wise chi-square test for the room blocks. Columns marked with an asterisk were included in chi-square testing.

Room Block	Fully Burned*	Partially Burned*	Total Burned Structures	Unburned Structures*	Total Structures
100s	1	1	2	21	23
200s	3	0	3	22	25
300s	0	0	0	18	18
400s	4	1	5	10	15
Southeast	0	0	0	9	9
Totals	8	2	10	80	90

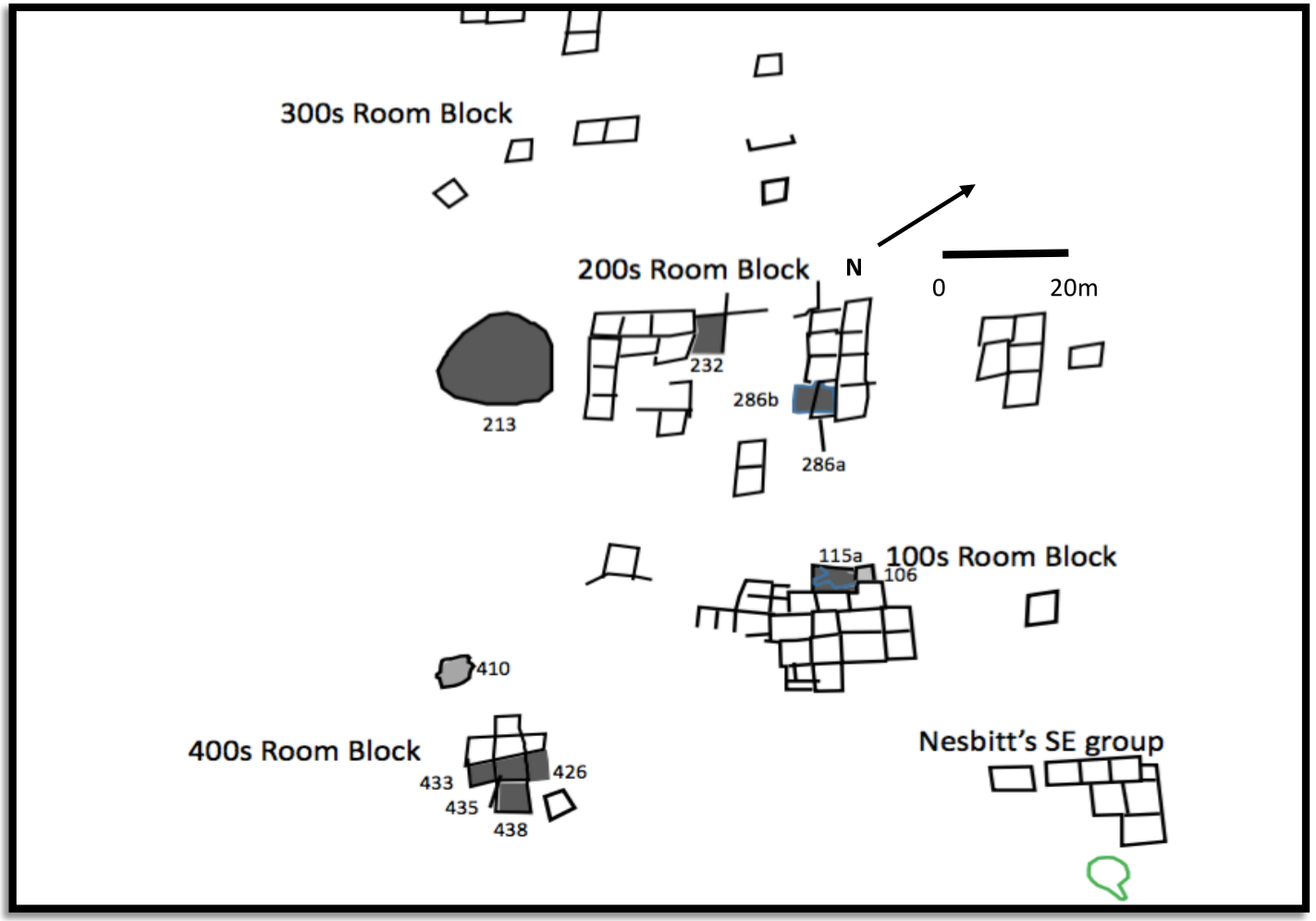

Figure 6.21. Map of locations of burned or partially burned structures at Mattocks. Burned rooms are shaded and numbered. Structures outlined in green date to the Georgetown phases (A.S. 550-650), Three Circle phase (A.D. 750-900) structures are outlined in blue, and Classic (A.D. 1000-1130) are shown in black.

With regards to the extent and severity of the burning, some qualitative differences between the room blocks appear. Both the 200s and 400s room blocks contained the most burned structures and those that burned severely (Figure 6.20). Gilman and LeBlanc (2017:463) noted that Pithouse 286b was most likely burned and ritually closed in a manner that mirrored the termination of Kiva 213 due to the artifact fragments supposedly placed in the roof before the fire was started.

In sum, structures were burned during and after the Late Pithouse period. Three of the five room blocks contained burned structures, some burned for severely than others. Three Circle Pithouse 286b's burning was most likely part of a termination ritual similar to the one performed on nearby Kiva 213. No statistically significant differences between the room blocks were recorded.

Cleaning and salvaging prior to or shortly after abandonment

The procedure of removing floor assemblages or central posts, or dismantling a roof before a structure is terminated or burned is both a practical and meaningful activity. The Hopi have been documented as removing timbers or construction materials for reuse and cleaning the floors of material culture, pots mainly, on the eve of retirement of that structure Hopi (Ellis 1968; Mindeleff 1891, 21-31, 62). Hodder (2006, 2016) notes that many structures at Çatalhöyük are cleaned and filled, thereby preserving the architecture and ancestors buried under the fill. This cleaning and filling is part of the renewing process before later construction. Similarly, many Mimbres structures and rooms are closed out with termination rituals involving cleaning and removing of construction materials and the placing of dedicatory items in

post-holes and in the roof (Creel and Anyon 2003; Gilman and LeBlanc 2017:103).

NAN Ranch. At least one structure from each room bock at NAN Ranch was cleaned and the floor cleared prior to either intentional termination practices or abandonment (Figure 6.22). The practice of removing artifacts from the floor was common in the earlier occupation of the site, as evidenced by the cleaning of all three San Francisco phase structures in the Southeast cluster. One Transitional room was cleaned, but as Table 6.22 demonstrates, most of the recorded cleaning activity came from Classic rooms. With the exception of the isolated Classic suite of Rooms 92 and 93 belonging to the Southeast group, pre-retirement cleaning was common for both the South and East room blocks. The South room block did have the most cleaned rooms (n=4) relative to total rooms built for each room block, but according to the data present in Table 6.22, the room block does not significantly vary from either the East (χ=3.110, p=0.211) or the Southeast room block (χ=3.748, p=0.154). Likewise, pairwise comparisons resulted in no statistically significant differences between the East and Southeast (χ=0.937, p=0.615).

Table 6.22. Frequencies of Pre-Abandonment Activities such as Cleaning or Removing Construction Materials for Room Blocks at NAN Ranch. Columns marked with an asterisk were included in chi-square testing.

Room Block	Cleaned Prior to Abandonment	Removed Construction Materials	Total Cleaned Structures*	Uncleaned Structures*	Total Structures
East	3	3	6	52	58
South	4	0	4	54	60
Southeast	1	2	3	51	54
Totals	8	5	13	159	172

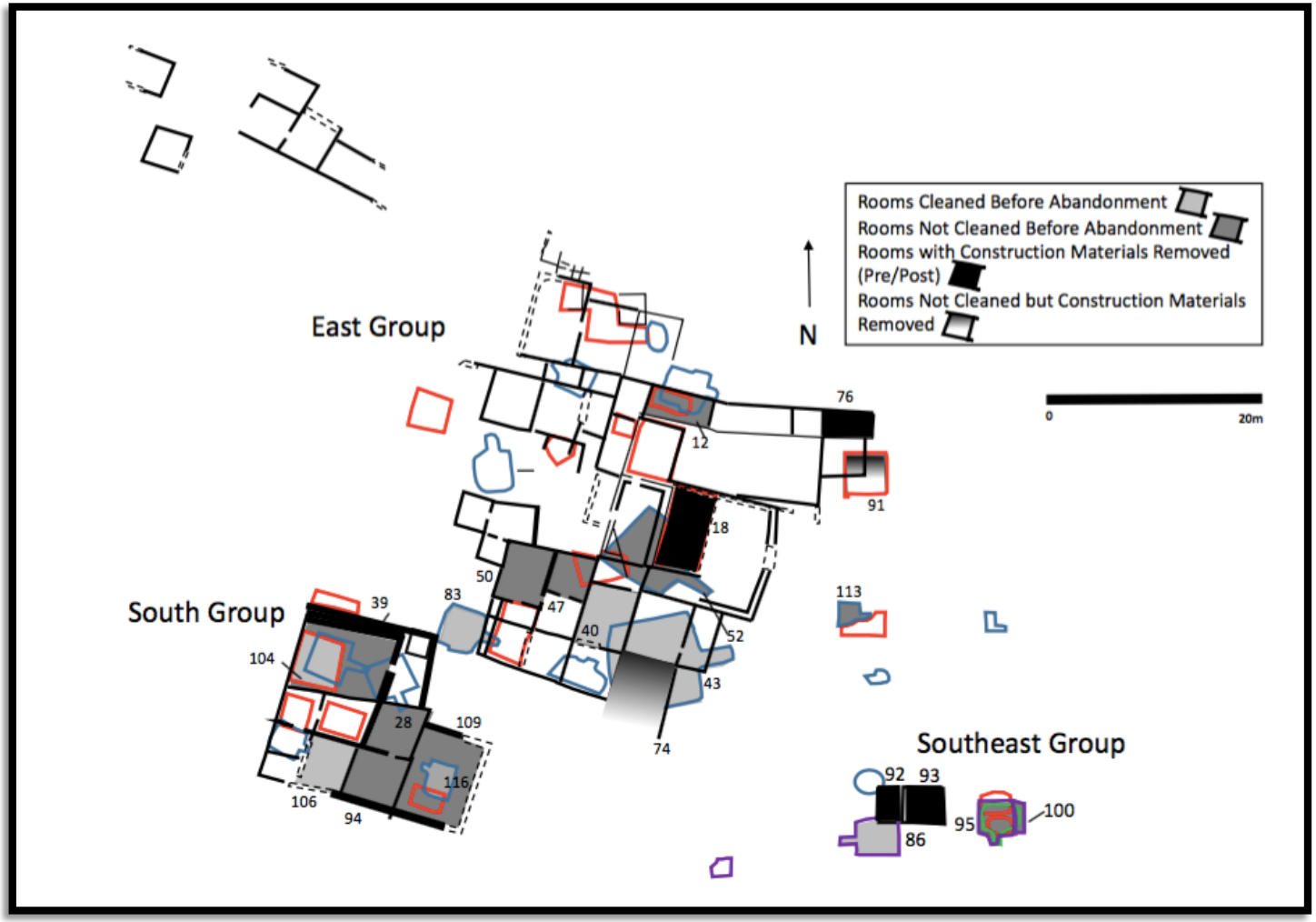

Figure 6.22. Map of locations of cleaning or removing activities prior to or shortly after abandonment at NAN Ranch. Structures outlined in green date to the Georgetown phases (A.S. 550-650, purple defines San Francisco phase structures (A.D. 650-750), Three Circle phase (A.D. 750-900) structures are outlined in blue, Transitional (A.D. 900-1000) are shown in red, and Classic (A.D. 1000-1130) are shown in black.

Shafer (2003:44) asserts that ancient reuse of stone and timbers was arguably pretty common for later building construction, and are partially to explain the dearth of the ruins of hatchway frames. Interestingly, only one Transitional Room (91) was documented of having construction materials removed before or shortly after retirement of the rooms. The majority of rooms were of Classic age and none of the Georgetown or San Francisco age pithouses in the Southeast locale were robbed of materials. Reuse did take place in both the East and Southeast room blocks.

For isolated Rooms 92 and 93 suites, excavators noted the lack of mound formed by wall fall and suggested architectural stone was robbed in ancient times to build other rooms. The same explanation may account for the small mound for Room 74 (Shafer 1986:14). Room 76 may have been on the receiving end of a construction material salvage effort. This room has been associated with a very early date and it may be that the burned rooffall beams were salvaged from an earlier building that went into disuse (Shafer 1986:14). Unlike those rooms mentioned above, Room 91 had its center post removed before it was burned and subsequently abandoned. This last example I would argue to be evidence of a termination ritual given Room 91's unique floor features.

Thus, all the room blocks with the exception of the South room block is associated with at least one instance of ancient salvaging or removal of original construction materials belonging to earlier abandoned structures. No statistically significant differences occur between room blocks. Removal was probably a common and practical activity but this does not discount the meaningful aspect of say having a

center post from one of the earliest structures at a site in a later construction. This is exceedingly the case for communal or ceremonial structures.

Galaz. As demonstrated in Table 6.23, the relative frequencies of cleaning, not cleaning, or removing construction materials before abandonment are roughly equal for the three room blocks at Galaz. More structures are left with floor assemblages than not, regardless if they are pithouses or pueblo rooms (Figure 6.23). We cannot always conclude that rooms not cleared before abandonment were hastily left and forgotten. Indeed, Galaz 42A was not cleaned prior to ritual retirement and instead two floor caches of special items were deposited just before burning (Anyon and LeBlanc 1984:124).

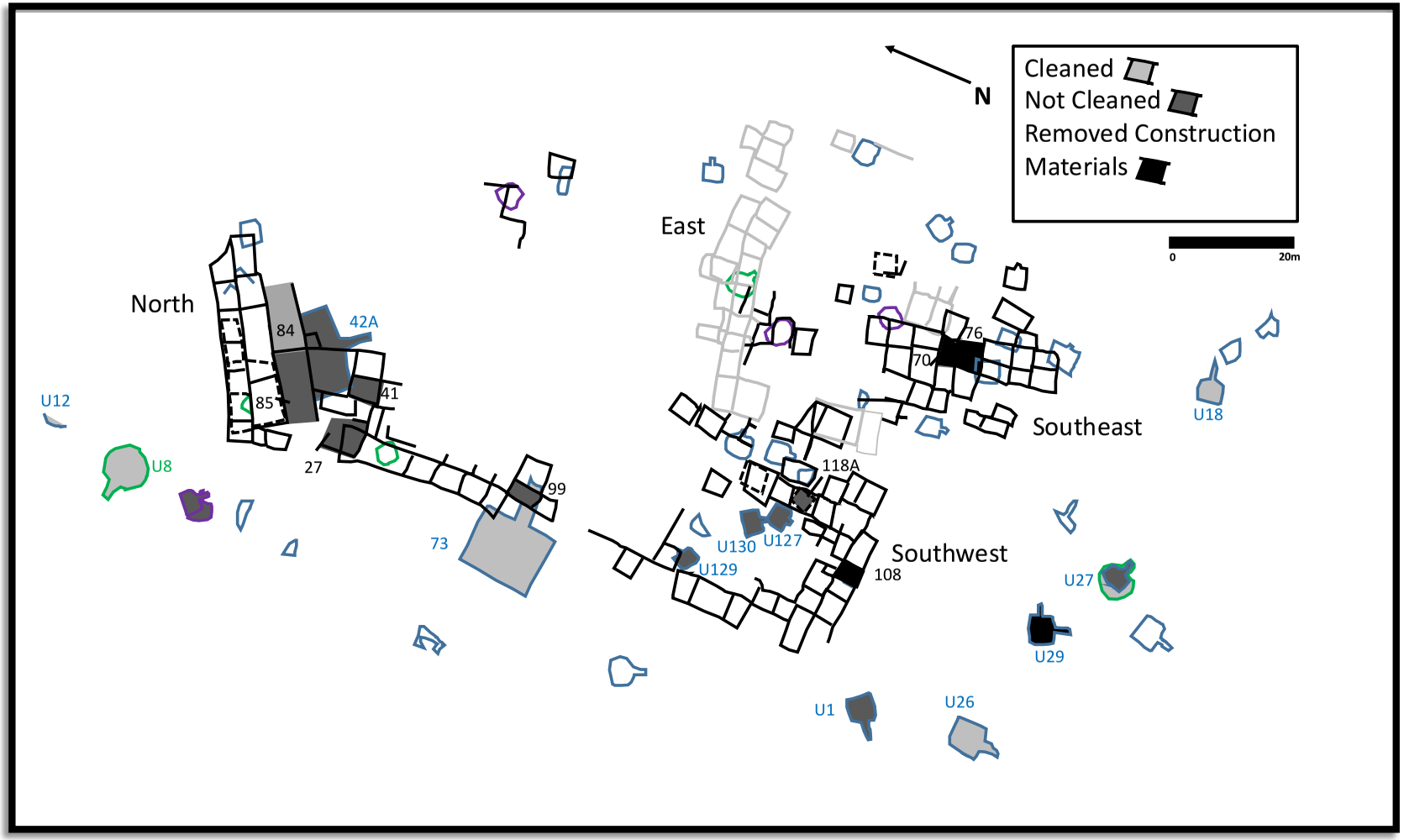

Figure 6.23. Map of locations of cleaning or removing activities prior to or shortly after abandonment at Galaz. Green represents Georgetown age structures (A.D. 550-650), San Francisco phase structures (A.D. 650-750) are outlined in purple, Three Circle phase (A.D. 750-900, is blue, (Classic (A.D. 1000-1130) is black, and Postclassic (A.D. 1130-1350) is shown in gray.

I found only four recorded structures that had their building materials removed either before or shortly after abandonment. Interestingly, none of those four structures were not in the North room block as I might expect due to the high frequency of remembering practices performed within this room block. Two Early Classic rooms were robbed of wall cobbles (Rooms 70A, 76B) a Three Circle pithouse roof were dismantled presumably for use in later construction, an Early Classic Room (108) had its roof dismantled before inhabitants built Room 114, and a Three Circle phase pithouse's roof was dismantled before it was realigned and rebuilt (Anyon and LeBlanc 1984: 72,101, 105). As per the data list in Table 6.23, no statistically significant differences are reported for all room blocks at the site (χ=0.3.151, p=0.533). Similarly, pairwise comparisons resulted in no statistically significant differences between the North and Southeast (χ=3.001, p=0.223), North and Southwest (χ=2.352, p=0.309), and Southeast and Southwest room blocks (χ=0.505, p=0.777). In sum, cleaning and removing were not common practices prior to abandonment at Galaz, and those structures that do have evidence of these activities may have been important and ritually retired.

Table 6.23. Frequencies of Pre-Abandonment Activities such as Cleaning or Removing Construction Materials for Room Blocks at Galaz.

Room Block	Cleaned Prior to Abandonment	Not Cleaned	Removed Construction Materials	Total Structures
North	3	7	0	10
Southeast	1	0	2	3
Southwest	2	6	2	10
Totals	6	13	4	23

Mattocks. Only nine instances of pre-abandonment activities such as cleaning or removing of reusable construction materials was present for Mattocks. Most of the cleaning occurred in Classic structures although there are few pithouses at the site. Only two of the three pithouses floors were cleared of artifacts before abandonment. As Table 6.24 and Figure 6.24 illustrate, Rooms 286, 410, 423, 325, 425, 427 were documented as being cleared prior to a carefully planned abandonment. Thus, except for the Southeast, pre-abandonment structure cleaning is documented for each room block and is most likely a fairly common practice.

Table 6.24. Frequencies of Pre-Abandonment Activities such as Cleaning or Removing Construction Materials for Room Blocks at Mattocks.

Room Block	Cleaned Prior to Abandonment	Removed Construction Materials	Total Structures
100s	0	1	1
200s	1	1	2
300s	1	0	1
400s	4	0	4
Southeast	0	1	1
Totals	6	3	9

I recorded only three cases of construction materials being salvaged for later reuse prior to the abandonment of the structure. This salvaging by inhabitants occurred during the earlier occupations of the site in the Southeast, 100s and 200s room blocks. Next to no rooffall was recorded for Pithouses 80b and 115b suggesting that the roof was dismantled and the timbers were taken for reuse in later structures (Gilman and LeBlanc 2017:103, 107). Likewise, the absence of burned beams or post found in situ suggests that construction materials were removed prior to the burning

of the structure (Gilman and LeBlanc 2017:115). While a few Classic and two pithouses were cleaned, great care was taken to remove useful roof construction materials before burning and retirement of all three of the pithouses. Presumably, the materials from Pithouses 286b and 115b were used in the later superimposed pueblo Rooms of 286a and 115a. This may suggest an effort to attain continuity with the older or earliest occupation of the site and its ancestral inhabitants. For both cleaning and removing of construction materials prior to abandonment, a chi-square test indicated no statistically significant differences between room blocks. (χ=14.225, p=0.076),

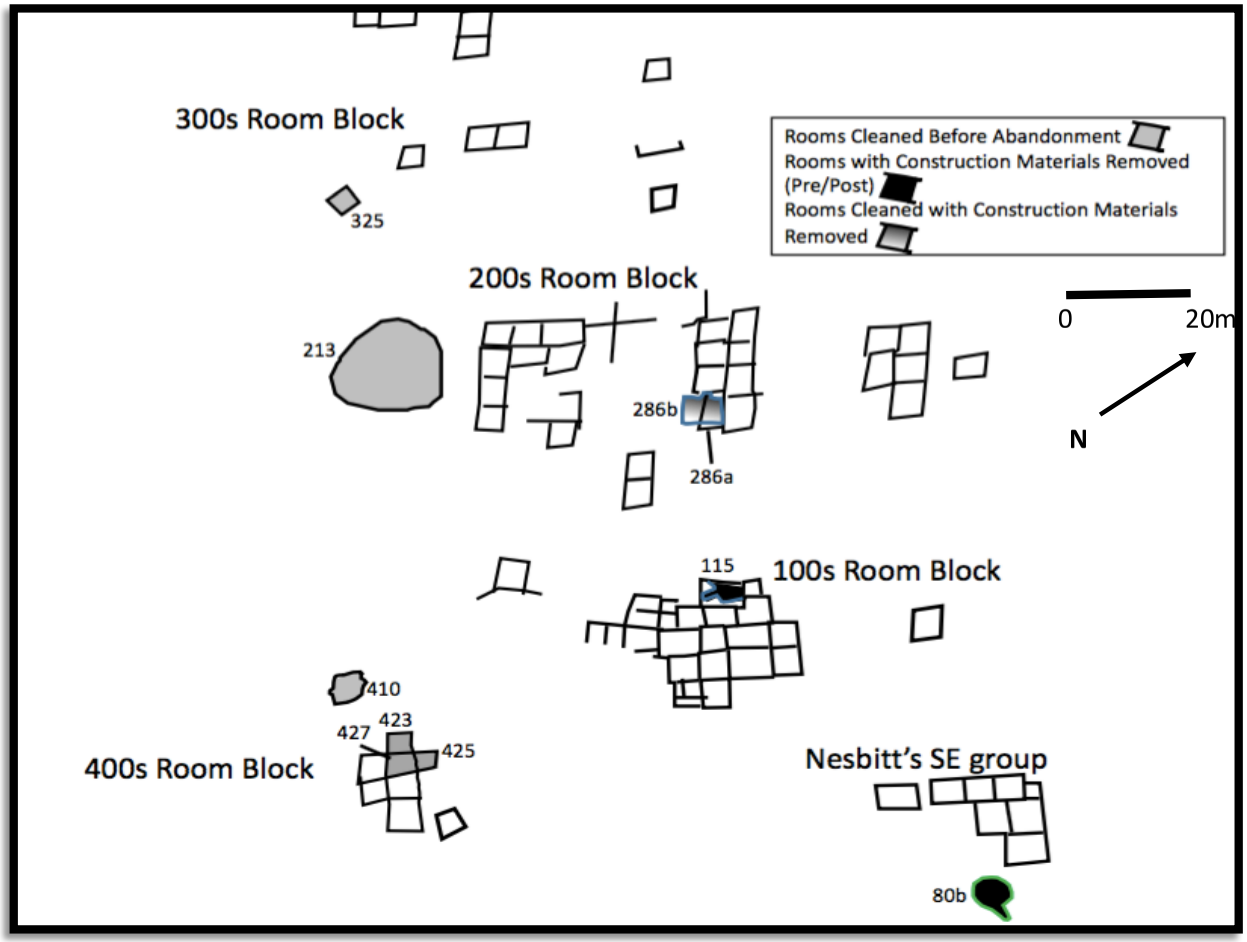

Figure 6.24. Map of locations of cleaning or removing activities prior to or shortly after abandonment at Mattocks. Structures outlined in green date to the Georgetown phases (A.S. 550-650), Three Circle phase (A.D. 750-900) structures are outlined in blue, and Classic (A.D. 1000-1130) are shown in black.

Site and Room Block Summaries

As observed above, the activities of architectural superpositioning, pre-room burials, multiple floors, remodeling, and midden creation through pit filling or dumping trash in abandoned rooms, razing, burning, and pre-abandonment activities create rich and complex palimpsests on the landscape by Mimbres groups. Through these various activities and processes of adding and cutting, I examined how social and lineage memory is maintained, strengthened, or forgotten and avoided by various intra-site groups across generations. Different frequencies of these architectural practices suggest intra-site variations in how, when, how frequently, and how intimately groups engaged with their ancestors and places of the past. The intra-site differences are summarized below for each site, followed by a summary of the observations supporting my arguments. For each site, I summarize the temporal patterns followed by the intra-site differences for each measure.

Adding Activities at NAN Ranch

As seen in Table 5.25, in general architectural superpositioing at NAN Ranch is quite common in the Transitional and Classic periods. However, it begins and is practiced continually into the Transitional period in the Southeast locale. There does seem to be a greater continuity of space and encompassing type of superposition at NAN Ranch (n=62), in fact the most continuity at any site investigated. This pattern appears culturally meaningful and may indicate that to those residing at NAN Ranch regarded the demonstration of continuity with their past and their places on the landscape to be of paramount importance, as opposed to other sites like Mattocks

where superposition was not as high a priority. But as with other sites, the exact numbers of superimposed structures are difficult to determine due to excavation bias, looting, and later ancient construction over earlier structures.

Site-wide and pair-wise chi-square comparisons of superposition frequency between room blocks indicate that the East room block contained the most bisecting and encompassing superpositioning, even though not all pithouses are superimposed. Many occupations of rooms within the same four walls contribute to the many counts of encompassing superpositions, and suggest that this pattern is very likely statistically significant. When the length of time between construction events was considered, the chi-square resulted in significant differences between the Southeast and the other two room blocks, which suggests that it is extremely unlikely this resulted from chance alone. As a founding locale with the only Georgetown and San Francisco phase structures, the superpositioning of later structures spanned two and three architectural phase gaps, not possible at other room blocks. Thus, while the East room block may have the highest and most encompassing superposition during the Classic period, the inhabitants at the Southeast room block had the furthest reach into the past.

Overall great continuity in space is demonstrated by the construction of each room block, but the continuity in sacred space and the Transitional and Classic architecture over both Three Circle Phase Great Kivas in the East room block may set it apart somewhat. The only area of the site with access to all and most importantly the earliest occupations of the site is the Southeast cluster, and their knowledge and

establishment of long-term residence continuity is well noted and supersedes the continuity through superposition attempted by the other room block's social groups.

Pre-room burials were not commonly recorded but of those observed, each room block contained at least one burial that predates any construction. These burials predated Transitional and Classic rooms. Thus, extramural burials may have been part of the process determining the placement of later constructions relative to their ties to ancestors.

With regards to multiple flooring episodes, the practice begins during the San Francisco phase at NAN Ranch, and continues through the Transitional phase until it rises significantly in the Classic period. This suggest that the efforts of inhabitants to maintain certain places of their built landscape increased through time. Although the East room block contained the most overall rooms with multiple floors and the most rooms with three or more floors, this difference is not statistically significant. In general, each room block re-floored rooms especially Classic rooms in similar frequencies.

In terms of remodeling, most renovation activities occurred during the Classic period. Although the East room block contains the most counts of remodeling, each room block had remodeled rooms. Statistically, no significant differences in remodeling frequency occurred between the room blocks and any observed differences are very likely attributed to chance. Overall, much effort was exerted to keep a few rooms such as 39 and 58 in the South and East room block respectively functional over many generations of use. While all room blocks quantifiably exhibited

similar evidence of remodeling, it is clear that a few specific spaces were more important than others as evidenced by the work done to alter those built spaces.

Most likely placing trash in abandoned rooms and the filling of pits was quite common at NAN Ranch and other sites. Based on the low counts differences were not statistically compared. Both Three Circle Great Kivas under the East room block were filled, and four abandoned Classic rooms were used as trash dumps.

Table 6.25. Summary of Architectural Adding Processes at NAN Ranch.

Room Block	Super-position	Pre-Room Burials	Multiple Floors	Remodeled	Filing	Trash Dumps	Total Rooms with Adding Processes
East	41	1	10	8	2	6	68
South	13	2	6	5	2	0	28
Southeast	8	1	2	2	0	0	13
Totals	62	4	18	15	4	6	109

Cutting Activities at NAN Ranch

The complete or partial destruction of earlier rooms through razing or scouring is linked to architectural superposition. Razing of pithouses occurred in the Southeast locale to prepare surfaces for later constructions, but it was most commonly practiced during the Classic phase on Transitional and earlier Classic rooms. Chi-square tests resulted in no significant differences between room blocks with regards to the destruction of earlier rooms. See Table 6.26 for a summary of the counts.

Burning was quite a common practice at NAN Ranch and most likely was part of the retirement process of structures. Both pithouses and Classic pueblo rooms alike were burned, although most were of Classic age. No significant differences in the

frequencies of burned structures exist at NAN Ranch at the site level or between room blocks.

Also, related to the retirement process, cleaning floors and removing artifacts and construction materials are likewise probably very common although not always equally recorded. Each room block contained instances of floor cleaning prior to abandonment, but the South room block contains the most instances relative to total rooms. That said chi-square analysis suggests that this pattern is not statistically significant. In terms of removal, similarly each room block contains at least one documented case with the exception of the South room block. Those materials in the Southeast room block may have been removed shortly after abandonment, but no statistically significant differences occurred between room blocks.

Table 6.26. Summary of Architectural Adding Processes at NAN Ranch.

Room Block	Razed/ Scoured	Burned	Cleaned	Removed Construction Materials	Total Rooms with Cutting Processes
East	13	20	3	3	39
South	6	9	4	0	19
Southeast	2	3	1	2	8
Totals	21	32	8	5	66

Adding Activities at Galaz

Observable in Table 6.27, architectural superposition above earlier structures and periods was common at Galaz. Although starting during the San Francisco phases and continuing through the Three Circle phase, superpositioning was most frequently practiced during the Classic period. The majority (76%) of superimposed structures

were Three Circle phase pithouses underlying Classic rooms. Superpositioning continued as a practice into the Postclassic period with a room block overlying a Georgetown structure, and some Classic rooms, but the later room block was built in orientation towards the river and not with much reference to the previous Classic room block. No statistically significant differences were recorded between room blocks, and it is not very likely that any observed differences were indistinguishable from random sampling. Likewise, room blocks did not differ significantly with regards to the access into the distant past or being able to construct over the earliest structures. However, qualitatively the North room block does stand apart from the others in a few regards. Firstly, the North room block contains the first case of superpositioning. Secondly, two of the five Georgetown phase pithouses are superimposed by the North room block and by rooms mostly likely functioning as corporate kivas. And lastly, both of the Three Circle Great Kivas underlie rooms in the North room block. Thus, while all groups residing at Galaz appear to perform and maintain memory at the household and lineage level, those in the North room block might be performing their memory and genealogy at the community level as well as at the household and lineage scale.

With regards to the frequency of multiple floors at Galaz, most are of Classic age, although a few are pithouses. The majority of the rooms only contain two flooring episodes, although the North room block does contain the highest frequency of rooms with three or more floors. Similarly, two rooms that overlie Kiva 42A contain multiple floors, one of which has three distinct floors suggesting efforts to maintain

spatial continuity. Room 15 in the North room block also has the most elaborately constructed floor in the site. That said, pairwise chi-squares resulting in no significant differences between room blocks.

Remodeling of structures to extend the use life, was most frequently practiced at Galaz before the Classic period. Indeed, all but two renovated structures are pithouses, namely Three Circle pithouses. This suggests that efforts to increase pithouse longevity increased through time. The two Classic renovated structures were both kivas which suggest that decisions to remodel or not during the Classic period might be affected by the function of a structure. Each room block contained instances of remodeling and chi-square tests indicate any differences are not statistically significant.

All three room blocks contain areas of trash disposal and the filling of abandoned structure, suggesting it was a common practice at Galaz. At the site level, no differences exist between room blocks, but pairwise comparisons suggest that differences in the presence of trash dumps between the Southeast and North room blocks are unlikely the result of random chance. Postclassic trash in previously abandoned rooms indicates a later reoccupation of rooms in the North room block.

Table 6.27. Summary of Architectural Adding Processes at Galaz.

Room Block	Super-position	Pre-Room Burials	Multiple Floors	Remodeled	Filing	Trash Dumps	Total Rooms with Adding Processes
North	19	0	14	2	5	3	43
Southeast	21	0	7	3	2	1	34
Southwest	7	0	9	2	8	5	31
Totals	47	0	30	7	15	9	108

Cutting Activities at Galaz

As clearly shown in Table 6.28, razing is not well documented at Galaz. Only two rooms in the Southeast room block were razed and both were Classic rooms. Like NAN Ranch, burning was quite common at Galaz. Burning of structures upon abandonment was first practiced during for Georgetown phase structures and continued into the Classic period. Although chi-squares resulted in no statistically significant differences between room blocks, the North room block did contain the highest frequency not only of burning but of severely and most likely intentionally burned structures.

Pre-abandonment activities of cleaning floors and removing construction materials was practiced in each room block, although no materials were removed from structures in the North room block. Most commonly these structures were of Three Circle or Early Classic age. No statistically significant differences existed among room blocks at Galaz.

Table 6.28. Summary of Architectural Cutting Processes at Galaz.

Room Block	Razed/ Scoured	Burned	Cleaned	Removed Construction Materials	Total Rooms with Cutting Processes
North	0	13	4	0	17
Southeast	2	3	2	2	9
Southwest	0	10	1	2	13
Totals	2	26	7	4	39

Adding Activities at Mattocks

Adding activities for Mattocks are summarized in Table 6.29. In general, there is very little superpositioning at Mattocks. Both the Three Circle phase pithouses are superimposed, although the one in the 200s room block is directly associated through the alignment of the superimposed room's walls. The entryway of the Great Kiva 213 may have been superimposed by the west wall of the 200s room block. Georgetown structure 80b was superimposed by a Classic age activity surface. All of the overlying architecture dates to the Classic period.

Pre-room burials were documented for the 100s, 200s, and 400s room blocks. One Three Circle pithouse and five Classic rooms may have been constructed over earlier burials of potential ancestors.

With regards to rooms with discrete flooring episodes, all of the upper floors were constructed during the Classic period. No significant differences existed between room blocks. And although Room 41 in the 200s room block contained the most total flooring episodes, any observed differences are not statistically significant.

Remodeling was fairly commonly practiced at Mattocks. Both of the Three Circle pit houses, later superimposed, were remodeled. Remodeling and renovation activities became most frequent during the Classic on Classic rooms. Significant differences do occur between room blocks. Pairwise chi-square comparisons between the 400s and other room blocks suggests that real differences do occur and that the observed pattern is indistinguishable from the vagaries of sampling.

Depositing trash in abandoned rooms and filling earlier abandoned structures with trashy fill was quite common at Mattocks. All pithouse at the site were filled with fill and trash with the exception of Great Kiva 213 whose fill was sterile. No differences exist between room blocks with regards to the presence of trash or fill above roof fall or after abandonment. Any observed differences are indistinguishable from random sampling alone.

Table 6.29. Summary of Architectural Adding Processes at Mattocks.

Room Block	Remodeled	Multiple Floors	Pre-Room Burials	Filing	Trash Dumps	Total Structures
100s	1	3	1	3	4	1523
200s	3	2	1	1	3	25
300s	0	0	0	0	0	18
400s	6	4	3	3	3	15
Southeast	0	1	0	1	0	9
Totals	10	10	5	8	10	90

Cutting Activities at Mattocks

As summarized in Table 6.30, razing of earlier structures was nearly completely absent and unpracticed at Mattocks. Only the lower floor of Room 41 in the 200s

room block is razed. This dearth of razing may be attributable to the relatively late occupation of the site.

Burning was much more common of a practice than razing at Mattocks. Both the Pithouse 286 and Great Kiva 213 burned, but the other two pithouse remained unburned. The two that burned were most likely burned as part of termination rituals. With the exception of the Southeast room block, each room block contained at least one burned structure. Most of the burned structures were Classic rooms. Any observed differences between room blocks concerning the presence or absence of burning or the severity of the burning, are small enough that they cannot be confirmed as statistically significant. Like burning, cleaning and salvaging construction materials was likely a common practice at Mattocks and other sites. Both Three Circle pithouses were cleaned and timber or wall stone removed prior to abandonment. Similarly, the sole Georgetown pit house was also salvaged for construction materials, presumably to be reused in later structures. The observed differences between room blocks are small enough that they cannot be confirmed as statistically significant.

Table 6.30. Summary of Architectural Cutting Processes at Mattocks.

Room Block	**Razed**	**Burned**	**Cleaned**	**Removed Construction Materials**	**Total Structures**
100s	0	2	0	1	3
200s	1	3	2	1	7
300s	0	1	1	0	2
400s	0	5	4	0	9
Southeast	0	0	0	1	1
Totals	1	11	7	3	22

To review, the behaviors discussed throughout this section and chapter are roughly equally performed among sites. Quantitatively, the frequency of occurrences of these behaviors is similar among room blocks and between sites. Qualitatively they differed in terms of how far back into the past they had access to as well as the severity of burning and the remodeling of ceremonially important structures. This suggests that these building and rebuilding activities were commonly performed as groups residing in the Mimbres Valley constantly created, maintained, forgot, and negotiated ties to their ancestors, past and past places across the Pithouse-to-Pueblo Transition. While all sites have activities that start to be practiced at the start of the Late Pithouse Period, they are most commonly and intensively practiced during the Classic period. Room blocks and sites differ with regards to time elapsed between superimposed construction episodes and this was the most telling measure of architectural social memory.

CHAPTER 7

DISCUSSION OF MEMORY PRACTICES WITHIN AND BETWEEN SITES

In this chapter, I explore and explain (if possible) any areas of internal variation in instances of remembering and forgetting through adding and cutting to interpret memory construction or display in terms of history houses, antecedence, and founding groups. The antecedence displays do not always correlate only with founding groups, suggesting a complex interplay that occurs as social actors interact with and link to the physical remains of their past in different frequencies, contexts, and times. Taken together, the adding and cutting behavior frequencies can be used to create multidimensional narratives of history, ancientness, and belonging.

I organized this chapter in two sections. In Part I, I provide summaries and frameworks including further analysis to document nuanced differences in memory constructions and performances between room blocks given certain parameters involving the visibility of activities of remembering and forgetting. As the previous two chapters detailed the analysis and results of comparisons among room blocks through time, I summarize here the types of memories performed through time as I measured them in the previous chapters. Next, I describe the inscribed memory and history-making narratives for each room block through time for each room block and site. Following that, I spend some time discussing more habituated and commemorative memory practices and the visibility levels of each. I then reanalyzed the three sites for any observable differences in the frequencies of the most visible commemorative practices. Lastly, in Part II, I revisit my arguments using the supporting observations

recorded in this chapter and the previous results chapters. The arguments are as follows;

1. Founding families and other not-founding families display real, imagined, or exaggerated antecedence throughout time.
2. There is a temporal break during the Classic period when inhabitants of sites and some room blocks practiced remembering at much greater frequencies than before. Similar activities of remembering may differ in the way memory is performed and the level of intimacy a group had with past places, peoples, and events.
3. The memory performance at Galaz is different, possibly at a different scale, and may relate to the ceremonial importance of the site.

Part I: Results Summaries and Further Qualitative Analysis

Summaries of the Statistical Results from Chapters 5 and 6

NAN Ranch. At NAN Ranch, room blocks did not differ in the length of elapsed time after abandonment and of the intrusive burial event. The NAN Ranch room blocks also did not differ in frequency of multiple floors, remodeling, cleaning before abandonment, burning, filling, use as trash dumps, or razing.

There are some differences in intrusive burials between room blocks. Significant differences arise in the Classic Period (A.D. 1000-1130) between the East and Southeast room blocks concerning intrusive burials. Longer periods after

abandonment and before intrusive burials were placed in the founding Southeast room block, suggest this group had access to a deeper, more distant past.

Room blocks at NAN Ranch also differed in the frequencies of the type of archaeological superposition (i.e. encompassing, bisecting, or touching) (Table 7.1). The East room block had more instances of encompassing architectural superposition and thus greater continuity between Pre-Classic and earlier Classic structures.

Table 7.1. Summary of Remembering and Forgetting Measures through Time for Each of the Room Blocks at NAN Ranch. Remembering is indicated in blue, forgetting in red, and either/both remembering and forgetting in purple. Founding locales are marked with an asterisk. Variables with statistically significant differences between room blocks are indicated by a (+).

Site	Room Block	Pre-Classic Measures	Classic Measures
NAN Ranch	East	• Intrusive burials • Superposition • Multiple floors & remodel • Cleaned & removed • Raze/scoured • Trash • Burn • Cache • Filling	• Intrusive burials • Burial removal/disturbance • Superposition+ • Pre-room burial • Multiple floors & remodel • Cleaned & removed • Raze/scoured • Trash • Burn • Cache • Filling
	South	• Intrusive burials • Superposition • Multiple floors & remodel • Cleaned • Raze/Scoured • Trash • Burn	• Intrusive burials • Burial removal & disturbance • Superposition • Pre-room burial • Multiple floors & remodel • Cleaned • Burning • Cache • Filling
	Southeast*	• Superposition • Pre-room burials • Multiple floors/remodel • Cleaned • Raze/Scoured • Trash • Burning • Filling	• Intrusive burials+ • Burial disturbance • Superposition • Removed materials

Galaz. At the site level, results indicate that few significant differences existed between intrusive burials and their associated contexts between room blocks at Galaz (Table 7.1). Intrusive burials were placed at similar depths and contained both men and women and individuals from all age ranges from infant to old adults. Significant differences do occur in the contexts of the intrusive burials, and whether they are in superimposed contexts or with other burials. The intrusive burials in the North room block are more frequently associated with ceremonial and superimposed contexts that had been previously used as repositories for the dead.

At Galaz, room blocks do not differ significantly from each other with regards to type of architectural superposition or the time elapsed between phases of architectural superposition. Nor do Galaz room blocks differ statistically in how often structures contained multiple floors, were remodeled, cleaned before abandonment, burned, filled, used as trash dumps, or razed (Table 7.2). In terms of burials, Galaz room blocks do not significantly differ from each other based on elapsed time after abandonment and before intrusive burial events, age or sex of intrusive individuals, or the frequency of removed or disturbed burials.

Statistically significant differences were found between room blocks concerning intrusive burial depths, the room functions of intrusive burial locations, the presence and absence of associated vessels, the frequency with which intrusive burials were placed in superimposed contexts and rooms with other burials. Generally, the North room block deviated from the patterns and frequencies observed at the other room blocks. Intrusive burials in the North room block were more likely to have been

placed in superimposed, ceremonial contexts with other extant burials, and contain associated ceramics.

Table 7.2. Summary of Remembering and Forgetting Measures and Results through Time for Each of the Room Blocks at Galaz. Remembering is indicated in blue, forgetting in red, and either/both remembering and forgetting in purple. Founding locales are marked with an asterisk. Variables with statistically significant differences between room blocks are indicated by a (+).

Site	Room Block	Pre-Classic Measures	Classic Measures	Post-Classic Measures
Galaz	North*	• Intrusive burials • Missing skulls • Multiple floors & remodeling • Cleaned • Trash • Burning • Filling	• Intrusive burials+ • Multiple floors & remodeling • Cleaned • Trash • Burning • Filling	• Only area of intrusive burials in special rooms+
	Southeast	• Multiple floors & remodeling • Cleaned • Trash • Burning • Filling	• Intrusive burials • Skulls only • Multiple floors & remodeling • Removed materials • Razed/scoured • Filling	• Superposition of later room block
	Southwest	• Intrusive burials • Burials removed • Multiple floors and remodeled • Cleaned & removed • Trash • Burning • Filling	• Multiple floors • Removed materials • Trash • Burning • Filling	

Mattocks. Most intrusive burials at Mattocks are found at similar depths, include both sexes and all age groups, and contain associated ceramics. Only the 100s and 200s room blocks contained burials in superimposed contexts. All of the room blocks except the Southeast group placed intrusive burials in rooms with other extant burials. The 200s room block differed from the others due to the possible communal nature of Room 268. The Southeast group at Mattocks does appear to contain the largest time span between the occupation of the Georgetown structure and the Classic dates for the burials intrusive into that structure. This long spread contrasts most significantly and statistically with the 400s room block, which was built, used, and contained later burials all within the Classic period (Table 7.3).

No statistically significant differences occur between room blocks with regards to architectural superposition where it is present. As well, none occur in the frequency of multiple floors, remodeling, cleaning before abandonment, burning, filling, use as trash dumps, or razing.

Table 7.3. Summary of Remembering and Forgetting Measures through Time for Each of the Room Blocks at Mattocks. Remembering is indicated in blue, forgetting in red, and either/both remembering and forgetting in purple. Founding locales are marked with an asterisk. Variables with statistically significant differences between room blocks are indicated by a (+).

Site	Room Block	Pre-Classic Measures	Classic Measures
Mattocks	100s	• Remodeling • Removed materials • Filling	• Bisecting superposition • Intrusive burials • Burial disturbances • Pre-room burial • Multiple floors • Trash • Burning • Filling
	200s*	• Pre-room burial • Remodeling • Cleaned & removed • Burning • Filling	• Encompassing superposition • Intrusive burials in communal+ • Burial removal/ disturbances • Pre-room burial • Multiple floors & remodeling • Trash • Burning
	300s		• No superposition • Intrusive burials • Cleaned
	400s		• No superposition • Intrusive burials • Burial removal • Pre-room • Floors & remodel • Clean • Trash • Burn • Filling
	Southeast*	• Removal of roof	• No superposition • Intrusive burials into oldest structure that already contained burials+

I bring these lines of evidence together in to support my three arguments in the second part of this chapter. Where there were only hints of differences between room blocks or corporate groups present in the measures from Chapters 5 and 6, more nuanced landscape narratives start to emerge when all these lines of evidence are combined. To do that effectively, it is helpful to distinguish these different memory practices in terms of the context, audience, and scale of their performances. To a certain extent, any differences in memory contexts and visibility are influenced by the stage of occupation, including abandonment and post-abandonment, of built places.

Analyzing Memory Type Based on Context and Visibility of Performance

Connerton (1989) distinguishes between habituated versus commemorative memory. This distinction is beneficial for use with the Mimbres data in terms of teasing apart different levels of visibility involving groups of different sizes and different motivations for the same practices at various times and in diverse social, ritual, and economic contexts. The distinction is also helpful in determining if certain patterns in activity frequencies are displays of real, invented, or exaggerated antecedence or other ways that groups negotiate their identities through and according to their biographies and the ever-changing present. Below and in Table 7.4, I outline which memory practices are measures of habituated or commemorative and the visibility level of each practice. Both habituated and commemorative practices take place during the occupation, abandonment of a structure, or after it has been decommissioned and no longer in use. I then further divide those categories by ranking those practices as stronger or weaker claims to primacy or antecedence.

Table 7.4. Memory Measures Ranked by Memory Type, Occupation Stage, and Visibility of the Activity.

Memory Type	**Occupation stage**	**Tier 1 Memory Measures (open-greater visibility, stronger claims)**	**Tier 2 Memory Measures (restricted-less visibility, weaker claims)**
Habituated (less visibility)	Occupation		• Multiple floors • Remodeling
	Abandonment		• Cleaning
	Post-Abandonment	• Superposition • Razing/ Scouring • Filling/ Building • Trash	
Commemorative (more visibility)	Occupation	• Caching	• Removing crania
	Abandonment	• Caching • Burning	• Removing building materials
	Post-Abandonment	• Intrusive burial in earliest/ ceremonial • Superposition (earliest/ ceremonial)	• Intrusive burial • Burial removing/ disturbing • Pre-room burials

Habituated Memory

This type of memory includes more everyday actions that are commonly practiced at the household level. As such, some of the Tier 2 measures are not as visible to people or involve people outside the household. These include, re-flooring episodes, remodeling, and cleaning floors prior to or at structure abandonment. Superposition, razing/scouring, filling, and depositing trash are all Tier 1 memory measures that are more visible and habituated activities after occupation of a structure. Razing/scouring, and depositing trash can be conceived as erasure, forgetting, or a discontinuity with the past, and filling as either forgetting or remembering.

Superpositioning is one means through which groups of the past made physical connections and maintained continuity with places of the past. Often, once a structure is built overlying an earlier one, the lower is no longer visible. Thus, this practice of constructing over earlier pithouses and rooms would be most meaningful to those who had knowledge of those earlier places.

As opposed to superposition, razing/scouring and trash create discontinuity with the past. Inhabitants made choices about their perceived present and may have chosen to reference and remember places or avoid and forget. Removing earlier structures is an invested process and would have been visible to participants and other nearby village members. The changing functional use of rooms after abandonment can also be detected in whether they are used as later trash dumps. The change in

their use might signal that these are no longer important places to maintain or cite through other referential activities.

Filling can be entombment that memorializes a place or structure by burying it and making it endure through time. Filling can also be done to level a surface for later construction. Building over a structure without direct reference might suggest forgetting and wiping the slate clean. Additionally, filling can be one step in the renewal process (Hodder 1990; McAnany and Hodder 2009:12). For example, at Çatalhöyük, the cleaning and filling of a room is thought to have been done to preserve the walls and floors of the structure and those ancestors that were interred beneath. Equally as likely, the adding or filling processes can signify efforts to obscure or cover up and avoid the past, or as *Tabula Rasa* to wipe the slate clean and build according to the present. This latter explanation is more akin to what McAnany and Hodder (2009:9) describe as palimpsests, which do not reference what lies beneath.

I imagine that participants, family members, and other residents of the same community might see these Tier 1 memory activities being performed or help perform them. They are potentially more visible than Tier 2 forms such as cleaning, multiple floors and remodeling that occur within the walls of a room or dwelling and include fewer people beyond the immediate household.

Commemorative Memory

According to Connerton (1989), commemorative memory is distinct from the everyday. This type of memory involves visitation to places of the past by descendants, and often highly ritualized acts performed at important places. An

example of commemorative memory would be intrusive burials placed into abandoned Great Kivas. Both habituated and commemorative practices take place during the occupation, abandonment of a structure, or after it has been decommissioned and no longer in use.

Some activities related to commemorative memory-making include removed crania, removing construction materials presumably for later reuse, intrusive burials, removed or disturbed burials, and pre-room burials. As mortuary practices are highly symbolic, activities that later affect human remains can be conceived of as highly commemorative. The above measures are considered Tier 2 measures as they are often performed in the confines of a room or household unit. Intrusive burials might prompt remembering when older extant earlier or pre-room burials are excavated, disturbed, or have elements removed. However, room size would limit participation in these meaningful activities.

Tier 1 commemorative activities also involve intrusive burials but at a different scale and in places that are much older of importance to a wider segment of the community. Similarly, caching or ritual depositions, and superpositioning are also included in this category given the context of the activity. Burning for termination or renewal is something that would have been very visual on the landscape, and as such is included in this discussion.

If architectural superposition is a community-wide tradition, and it is, then similarities in superposition practices through time are integral in discerning repetitive commemorative rather than habituated practice. The Mimbres data examined here

do not have the same organization of internal space or burials placed under the east platform as at Çatalhöyük. Likewise, the internal use of space varies considerably from structure to structure in short time period and there appear to be no over-arching rules governing changing functions (Gilman and LeBlanc 2017). The best examples of superposition for commemoration are those that are constructed over the earliest or the ceremonially important structures. Additionally, superimposed rooms with intrusive burials may also signify more commemorative building activities, as groups continually remember previous experiences interring other family members.

McAnany and Hodder (2009:13), would agree that superposition over earlier structures is one thing and can be a form of spatial continuity, but the filling of a structure and raising it up with many flooring episodes and occupations within the same four walls and an exact re-use of space are actions that speak to a new level of significance that exceeds that of simple continuity through superposition. It is thus commemorative of earlier activities performed and re-performed in those spaces. Also, the internal features touching or the re-use of post holes and hearths would suggest continuity and act as memory references to those earlier places.

Intrusive burials are relatively rare and are not everyday occurrences. As burials in general are meaningful and charged emotionally, so too would be burials deliberately placed into earlier contexts. With similar deliberateness, inhabitants may have left un-plastered burials open for later intrusions. Intrusive burials that were interred into the floors or fills of abandoned rooms from later superimposed rooms would have been much less visible than those interred in earlier non-superimposed

pithouses or especially in ceremonial structures. Thus, groups would have had to possess intimate knowledge of those places of the past to be able to refer to them physically in the form of intrusive burials.

Similar to intrusive burials are burials disturbed or removed or crania removed from existing burials. The dead too may be considered pieces of places (Bradley 2000), and removal for display, reuse, or avoidance of crania is not dissimilar to removing central posts or timbers before or shortly after termination of a structure through burning (Creel and Anyon 2003). Termination (burning) and foundational practices (pre-room burials) as such can be interpreted as acts of remembering, memorializing, or genealogy-building (McAnany and Hodder 2009:17). Burning of a structure must have been a very visceral event, allowing it to be remembered long after the event, through memory mnemonics (Creel and Anyon 2003; Echo-Hawk 2000).

Inscribed Room Block Memory Narratives

To get a comprehensive view of how groups remember and concomitantly forgot earlier places, peoples, and events using their inscribed activities creating and performed on the landscape, I combined these activities of remembering and forgetting to form cohesive room block memory narratives. By doing so, I produce a more holistic picture, while side-stepping the statistical issues of some small sample sizes. I will discuss each room block for each site in terms of frequencies of remembering, forgetting, and either or both remembering and forgetting practices through time. I discuss the Postclassic period only for the Galaz site because that time only occurs on Galaz. I will begin with Galaz, followed by NAN Ranch and then

Mattocks, after which I summarize the narrative at the site level through time and compare the room block narratives to each other.

The line graphs like those in Figure 7.1, were standardized by the highest count in each row to better illustrate changes through time (see Appendix B for examples). Thus, the period with the highest frequency will be plotted at 1, and other periods are a percentage of that highest frequency. The only exception is for the comparisons between room blocks, because I wanted to rank room blocks rather than differences across time. For these line graphs, I standardized many rows that belonged together. For example, superpositions and intrusive burials are both forms of post-abandonment remembering and thus the highest count from either row became the standard and all others were percentages of that standard. Therefore, all the memory measures were summed, and the room block with the highest frequency of collective remembering is represented by 1, and the other room blocks are subsequently ranked by percentage compared to the highest.

NAN Ranch

East room block. Before the Classic period and surface pueblos, the early picture of the East room block is one of much forgetting and less remembering (Figure 7.1). The filling, cleaning, and razing of structures decrease through time as burning, trash, superpositioning, intrusive burials and remodeling increase. Similar to all of the Galaz room blocks, the East room block begins its narrative with much forgetting and occupation and abandonment remembering and/or forgetting. This picture changes during the Classic period, where post-abandonment memory practices greatly increase

in frequency, as does remembering during occupation of a structure (Figure 7.1). However, as Figure 7.2 illustrates, while memory practices rise so do the ambiguous remembering and/or forgetting practices, and only during the Classic period are the memory performances nearly equal with the ambiguous category.

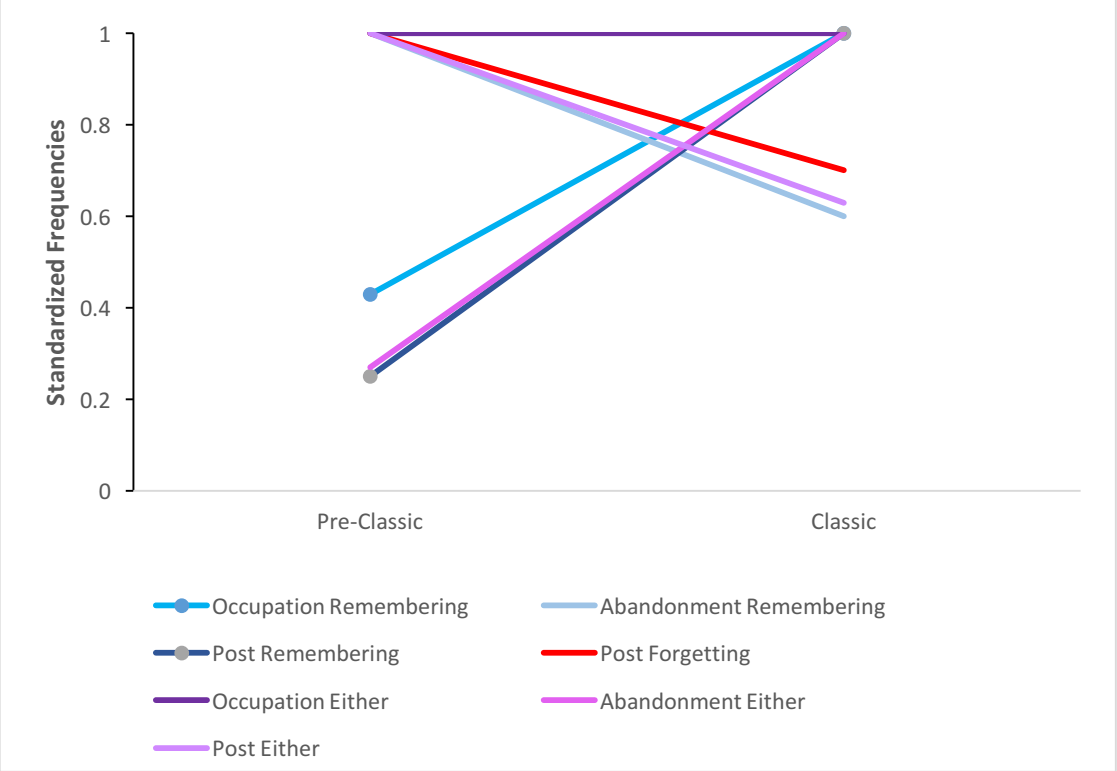

Figure 7.1. Standardized line graph of memory measures through time for the East room block of NAN Ranch. Remembering activities are in shades of blue, red denotes forgetting behaviors, and purple represents activities that are either/both remembering or forgetting given the context.

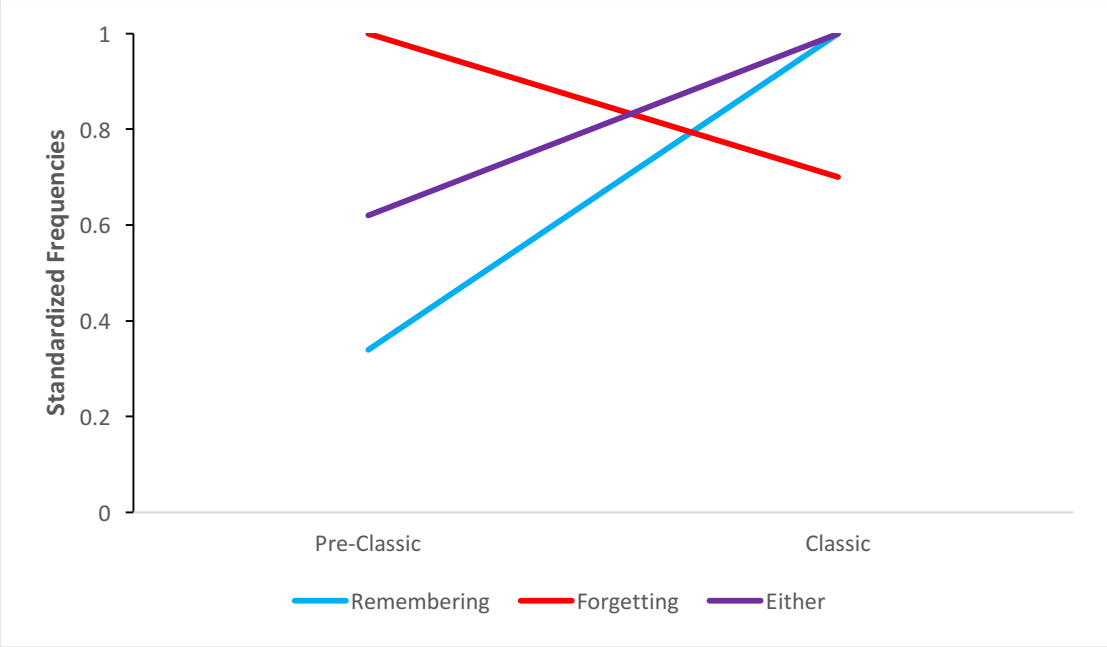

Figure 7.2. Standardized line graph of combined memory measures through time for the East room block of NAN Ranch. Remembering activities are in shades of blue, red denotes forgetting behaviors, and purple represents activities that are either/both remembering or forgetting given the context.

South room block. Like the East room block, the story of the South room block at NAN Ranch is one of much forgetting or ambiguity at the start during the Pre-Classic period with high frequencies of razing and trash. The measures decrease though time to the extent that they are absent during the Classic period. During the Classic period, forgetting is relatively non-existent, as is remembering at abandonment, but the other forms of memory, especially post-abandonment memory, greatly increase (Figure 7.3). It becomes clear from Figure 7.4 that that Classic period for the South room block was one in which remembering dominated at the expense of forgetting.

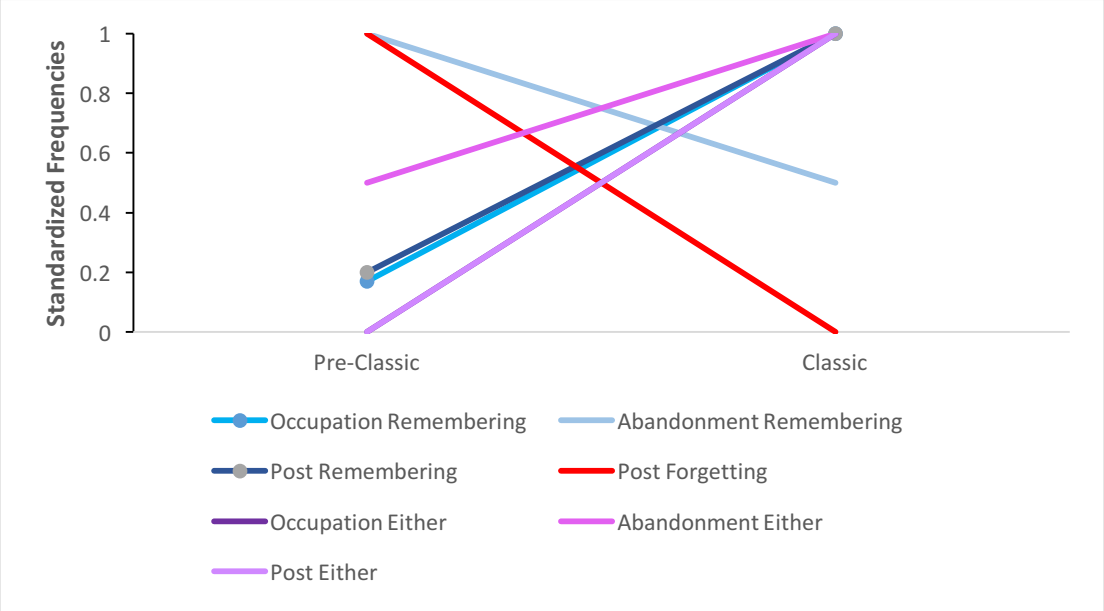

Figure 7.3. Standardized line graph of memory measures through time for the South room block of NAN Ranch. Remembering activities are in shades of blue, red denotes forgetting behaviors, and purple represents activities that are either/both remembering or forgetting given the context.

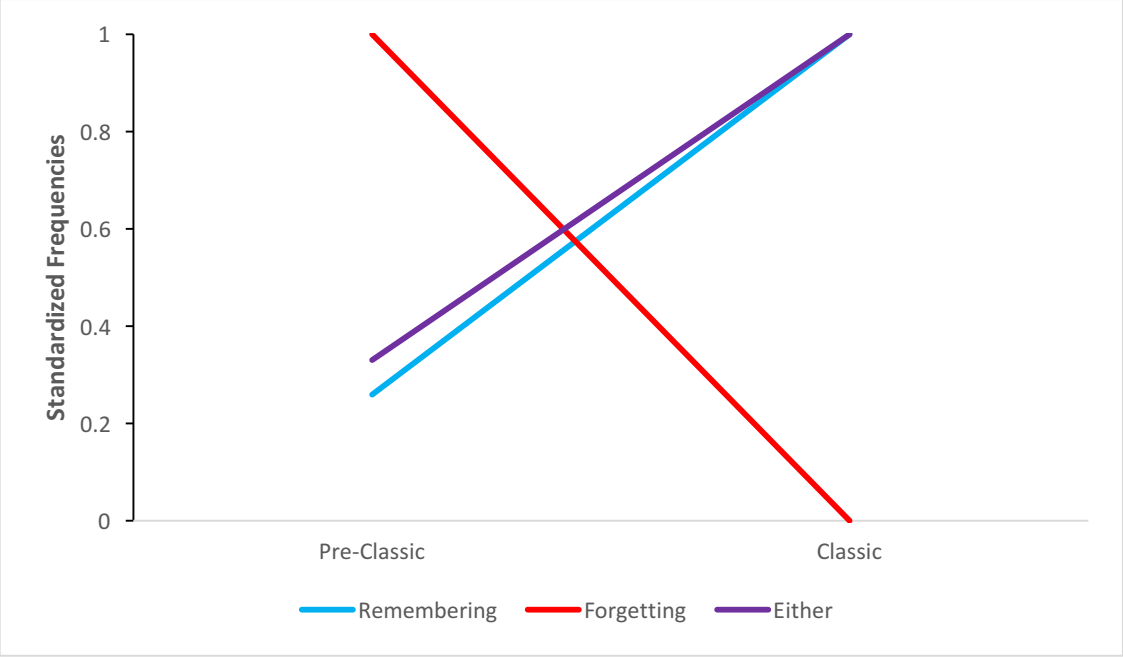

Figure 7.4. Standardized line graph of combined memory measures through time for the South room block of NAN Ranch. Remembering activities are in shades of blue, red denotes forgetting behaviors, and purple represents activities that are either/both remembering or forgetting given the context.

Southeast room block. The Southeast room block, which is the founding locale at NAN Ranch, offers an intriguing picture with changes in frequencies of remembering and forgetting through time and many inverse relationships. Initially, during the Pre-Classic period, intrusive burials, cleaning floors, and removing construction materials were less frequently practiced than remodeling and superposition. From the outset, superpositioning was important for this founding group, which is not something present before the Classic period for the other sites in this study. As shown in Figure 7.5, post-abandonment remembering was always frequently practiced and only a little more so during the Classic period at the Southeast room block when other groups likewise added intrusive burials and superimposed structures more readily. Forgetting, occupational remembering, and abandonment remembering and/or forgetting all decrease during the Classic period and are represented by the same line. Thus, while post-abandonment remembering for the locale remains high and constant from the Pre-Classic to the Classic period (Figure 7.6), the decrease in occupational remembering might suggest less knowledge of this earlier locale than before the Classic period.

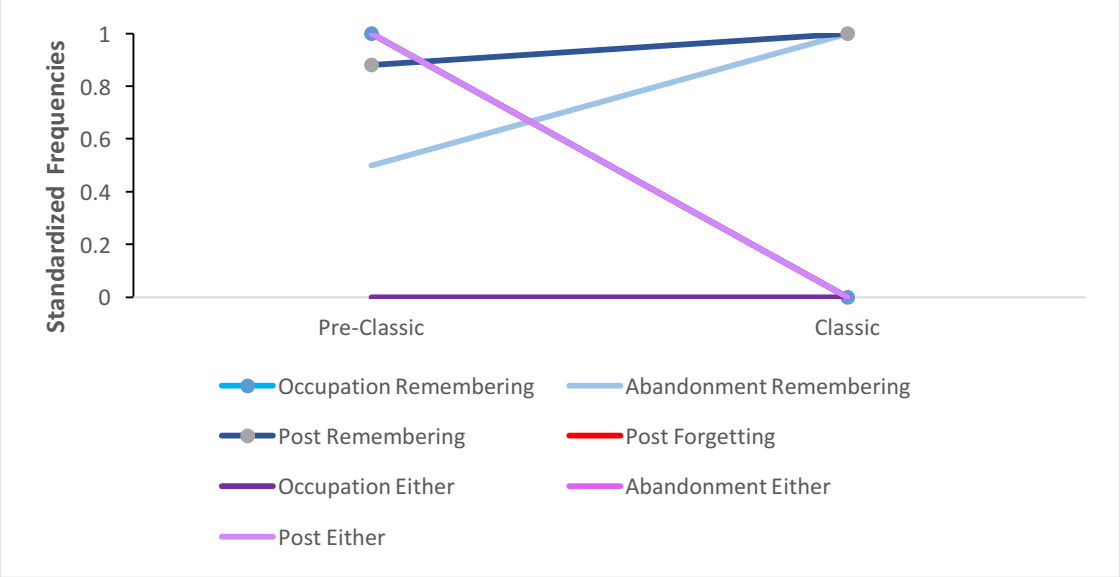

Figure 7.5. Standardized line graph of memory measures through time for the Southeast room block of NAN Ranch. Remembering activities are in shades of blue, red denotes forgetting behaviors, and purple represents activities that are either/both remembering or forgetting given the context.

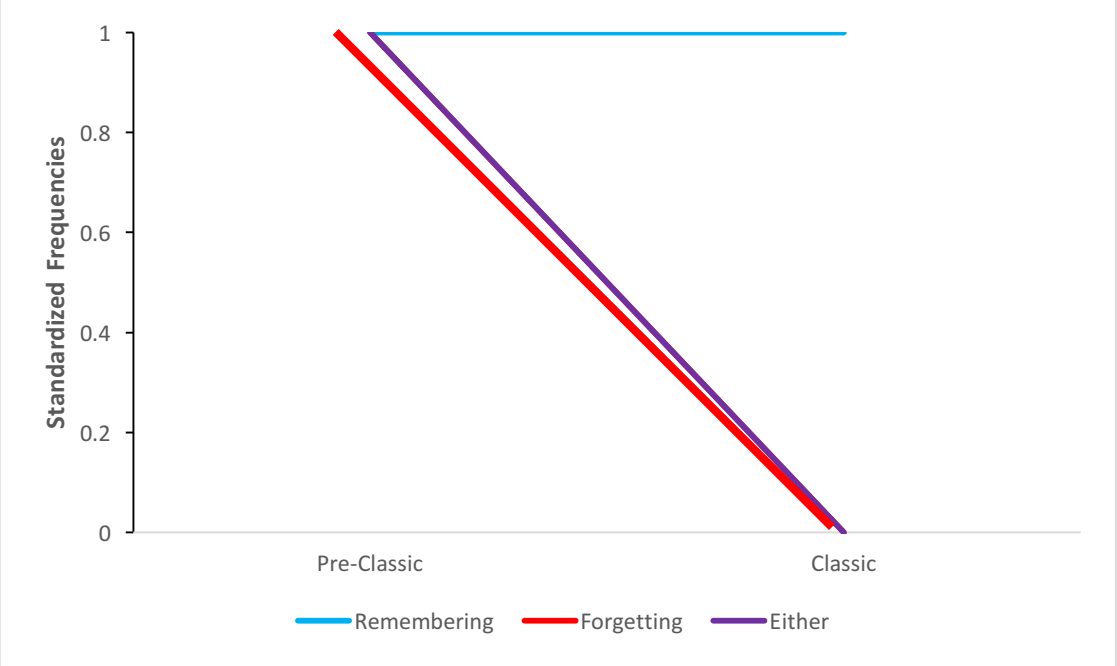

Figure 7.6. Standardized line graph of combined memory measures through time for the Southeast room block of NAN Ranch. Remembering activities are in shades of blue, red denotes forgetting behaviors, and purple represents activities that are either/both remembering or forgetting given the context. The Forgetting and Either line is the same line.

As a whole, the NAN Ranch site is rich with remembering, although not so much during the Pre-Classic period (Figure 7.7). Memory does increase through time as well as remembering and/or forgetting activities such as burning, while forgetting greatly decreases during the Classic period. Indeed, forgetting is non-existent at both the South and the Southeast room blocks during the Classic period, as opposed to the less dramatic slope of the line for forgetting in the East room block. It is clear that similar narratives of the past were constructed for founding (Southeast room block) and non-founding groups (South room block).

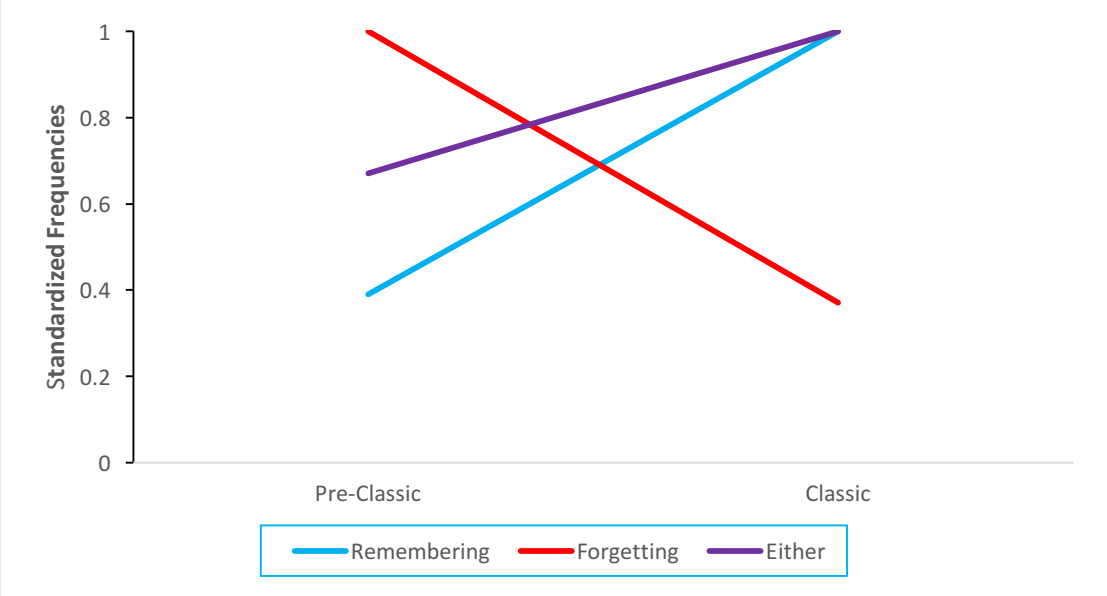

Figure 7.7. Standardized line graph of remembering and forgetting for all the NAN Ranch room blocks through time. The East room block is represented in blue, red is for the South, and purple denotes the Southeast room block.

When we compare the memory narratives for each room block to each other, a picture shown in Figure 7.8 emerges. The East room block initially had more remembering (and also forgetting; see above) and the frequency of these activities increased through time. Both the South and Southeast room blocks, which were

smaller than the East room block, had similar memory frequencies before the Classic period, but the South increased during this period. On the other hand, the founding residents of the Southeast locale maintained continuity both in the past and with regards to the high frequencies of their remembering.

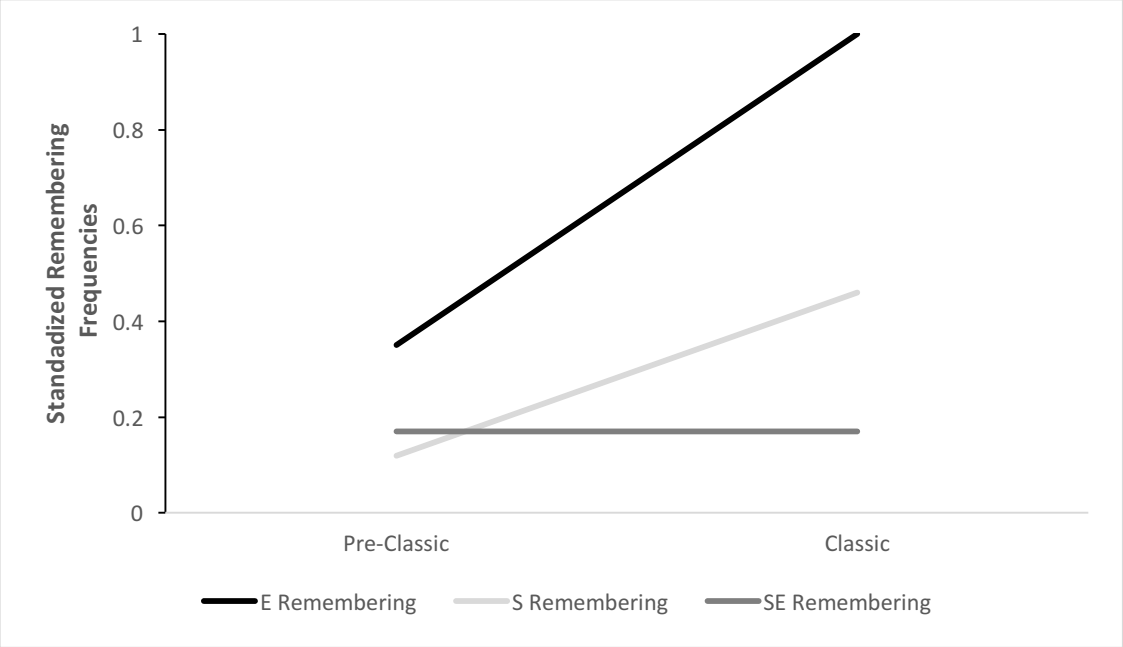

Figure 7.8. Standardized line graph of only remembering for all the NAN Ranch room blocks through time. The East room block is represented in black, the South in light gray, and the Southeast in dark gray.

Galaz

North room block. During the Pre-Classic period, the North and founding room block displayed higher frequencies of burning, caching, and burials missing crania than other room blocks and Tier 1 commemorative activities as a whole. During the Classic period, all of the memory measures (habituated and commemorative) increase in frequency except caching and cleaning floors and removing construction materials. As Figure 7.9 illustrates, memory or both memory and forgetting measures during occupation and abandonment are high during the Pre-Classic period, but decrease in

the Classic period. Coincidentally, post-abandonment memory quickly rises and decreases but continues into the Postclassic because of the intrusive burial counts. Figure 7.10 even better and more clearly demonstrates the dramatic increase in overall memory practices during the Classic period. Thus, the founding group was increasing their memory performances during the Classic period through physical links made with earlier structures long after the abandonment of those buildings. Memory was not as important a practice before the Classic period as it was during the Classic period. This pattern correlates with the increase in populations at the site during the Classic time frame. Apparently, earlier displays of antecedence through physical ties to earlier places was not as important as they became later.

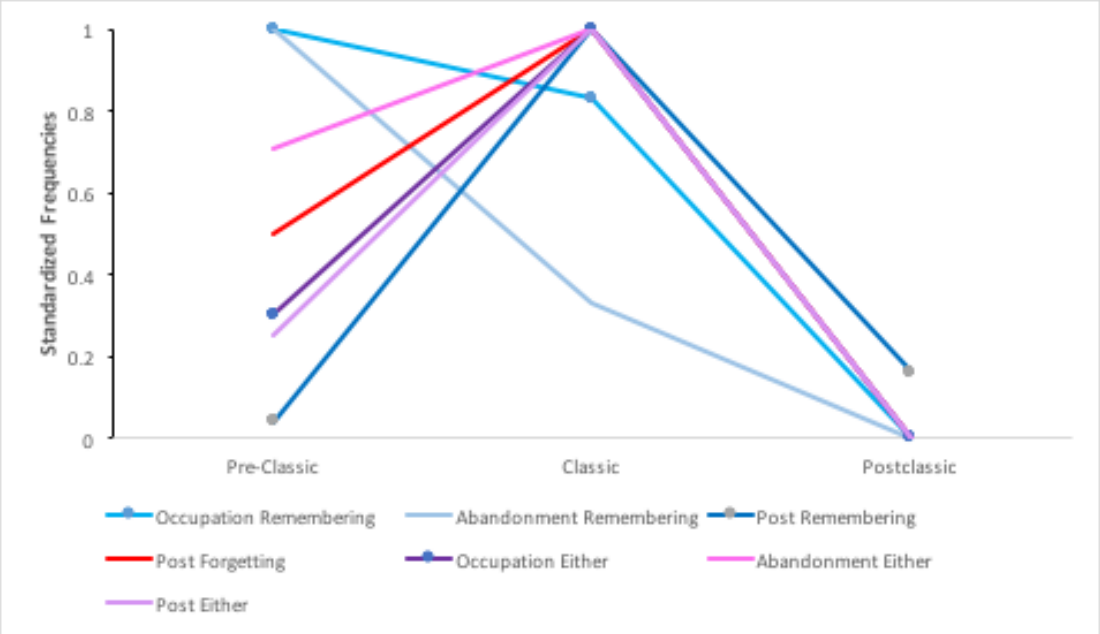

Figure 7.9. Standardized line graph of memory measures through time for the North room block at Galaz. Remembering activities are in shades of blue, red denotes forgetting behaviors, and purple represents activities that are either/both remembering or forgetting given the context. Post refers to post-occupational events.

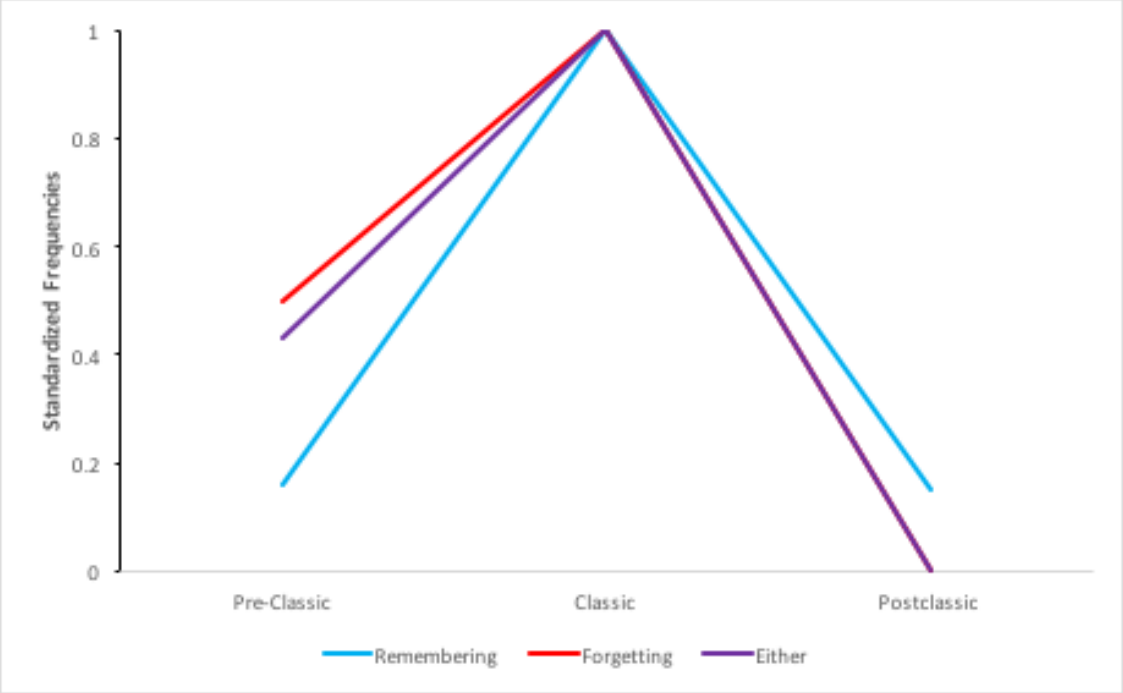

Figure 7.10. Standardized line graph of combined memory measures through time for the North room block at Galaz. Remembering activities are in shades of blue, red denotes forgetting behaviors, and purple represents activities that are either/both remembering or forgetting given the context.

Southeast room block. From Figure 7.11, it appears that remembering during structure occupation, post-abandonment forgetting and post-abandonment remembering/forgetting increased during the Classic, while abandonment remembering/forgetting decreased dramatically. The lumped remembering or forgetting categories in Figure 7.12 show that from the Pre-Classic to the Classic period, both remembering and forgetting rises, and both/either remembering/forgetting stays roughly the same. All three drop during the Postclassic period, and only remembering, through superposition, causes the frequency to remain higher than its Pre-Classic levels. Therefore, although not the founding locale, this residential lineage group was performing memory before, during, and after the Classic

period, but memory performance reached its highest frequency during the Classic period. Forgetting activities were more prevalent during the Classic period. The increase in remembering activities may signal ambiguity, contestations, or a parody of the antecedence of the residents in the North room block.

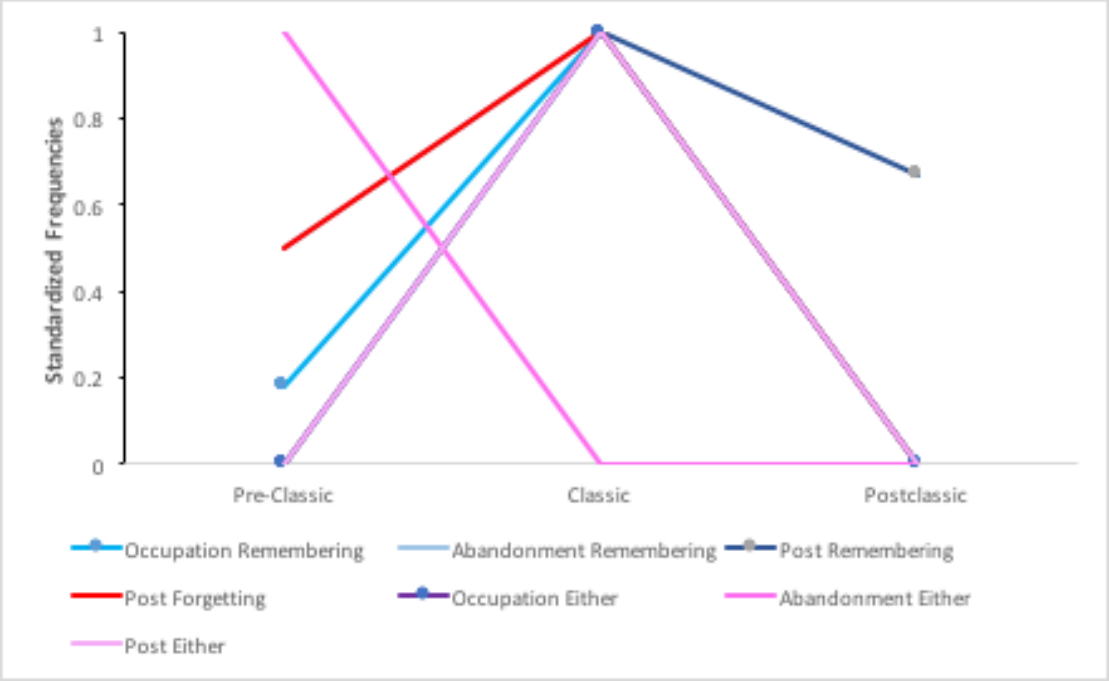

Figure 7.11. Standardized line graph of memory measures through time for the Southeast room block of Galaz. Remembering activities are in shades of blue, red denotes forgetting behaviors, and purple represents activities that are either/both remembering or forgetting given the context.

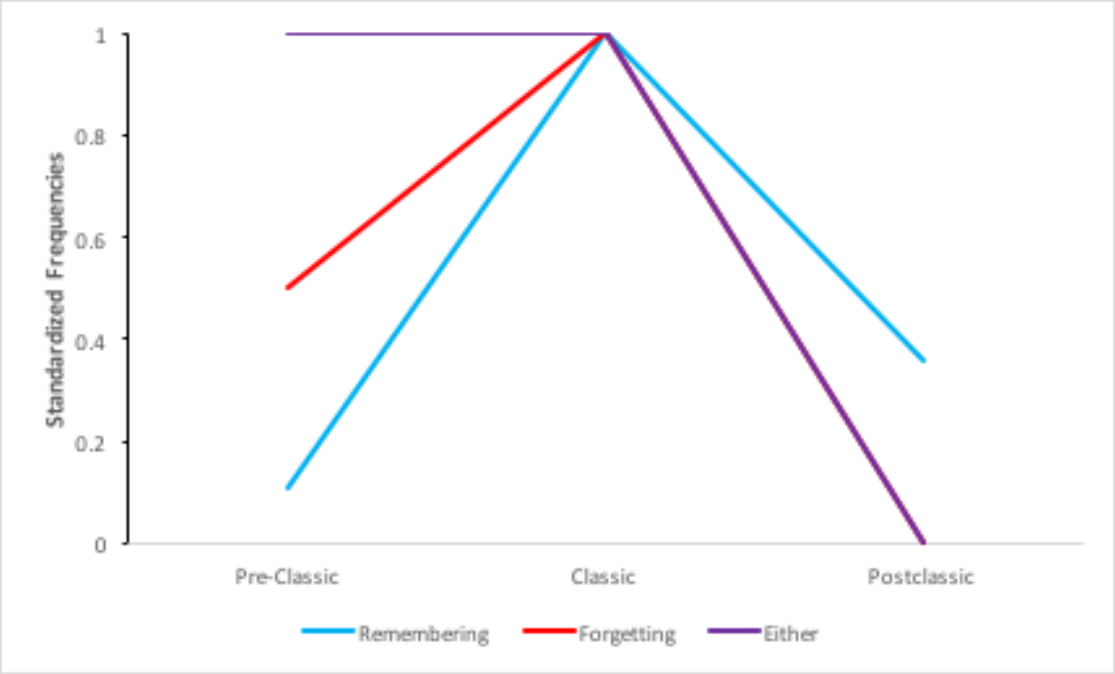

Figure 7.12. Standardized line graph of combined memory measures through time for the Southeast room block of Galaz. Remembering activities are in shades of blue, red denotes forgetting behaviors, and purple represents activities that are either/both remembering or forgetting given the context.

Southwest room block. The Southwest room block initial contains high levels of post-abandonment and abandonment remembering/forgetting and post-abandonment remembering and forgetting. This pattern changes during the Classic period, where occupational remembering is the only behavior to increase while post-abandonment remembering and/or forgetting stays the same. Interestingly, and unlike the other room blocks, post-abandonment remembering also decreases during the Classic period (Figure 7.13). This pattern is also demonstrated in Figure 7.14, which clearly depicts all activities decreasing in frequency during the Classic period. So, while both the North and Southeast room blocks are referencing their past more

through post-abandonment practices such as intrusive burials and superpositioning, something different is occurring at the Southwest room block.

Figure 7.13. Standardized line graph of memory measures through time for the Southwest room block of Galaz. Remembering activities are in shades of blue, red denotes forgetting behaviors, and purple represents activities that are either/both remembering or forgetting given the context.

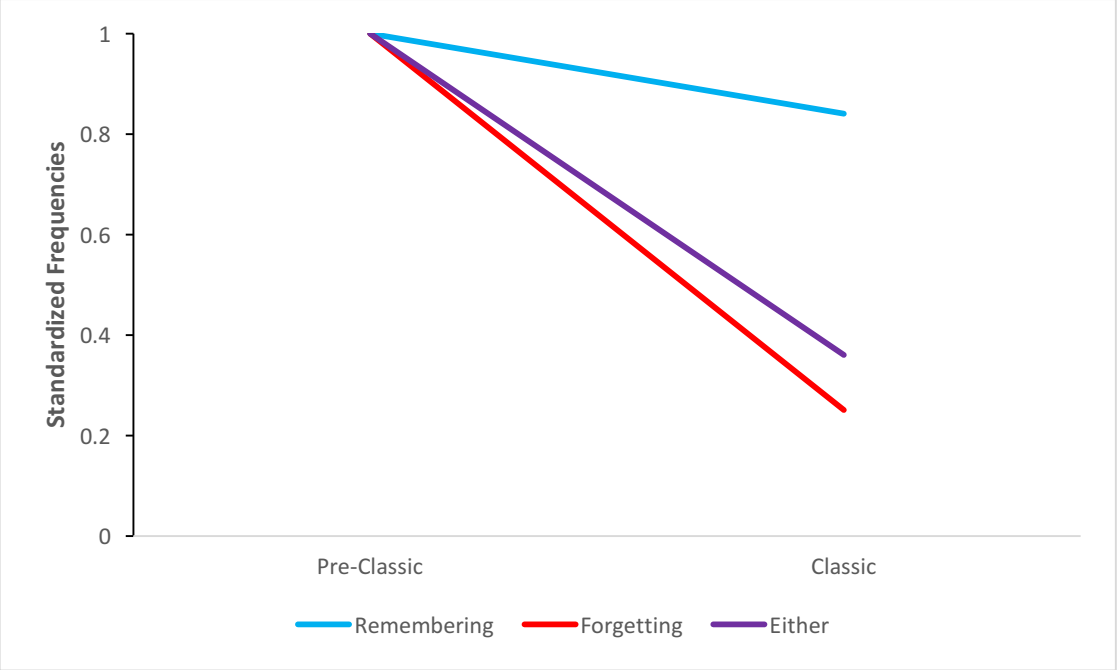

Figure 7.14. Standardized line graph of combined memory measures through time for the Southwest room block of Galaz. Remembering activities are in shades of blue, red denotes forgetting behaviors, and purple represents activities that are either/both remembering or forgetting given the context.

For the Galaz, the general temporal pattern of the frequency of remembering is one of increase, while that of forgetting decreases. It appears that fewer places are forgotten during the Classic period. From before to during the Classic period, remembering increases while forgetting and both/either remembering and/or forgetting decrease (Figure 7.15). Specifically, post-abandonment remembering through intrusive burials, superposition, and missing, disturbed, and removed burials are responsible for the rise. These behaviors continue into the Postclassic period, although they are a little less frequent than their Pre-Classic levels. It seems clear that more memory performances and less forgetting were most important during the Classic period and much less so before or after.

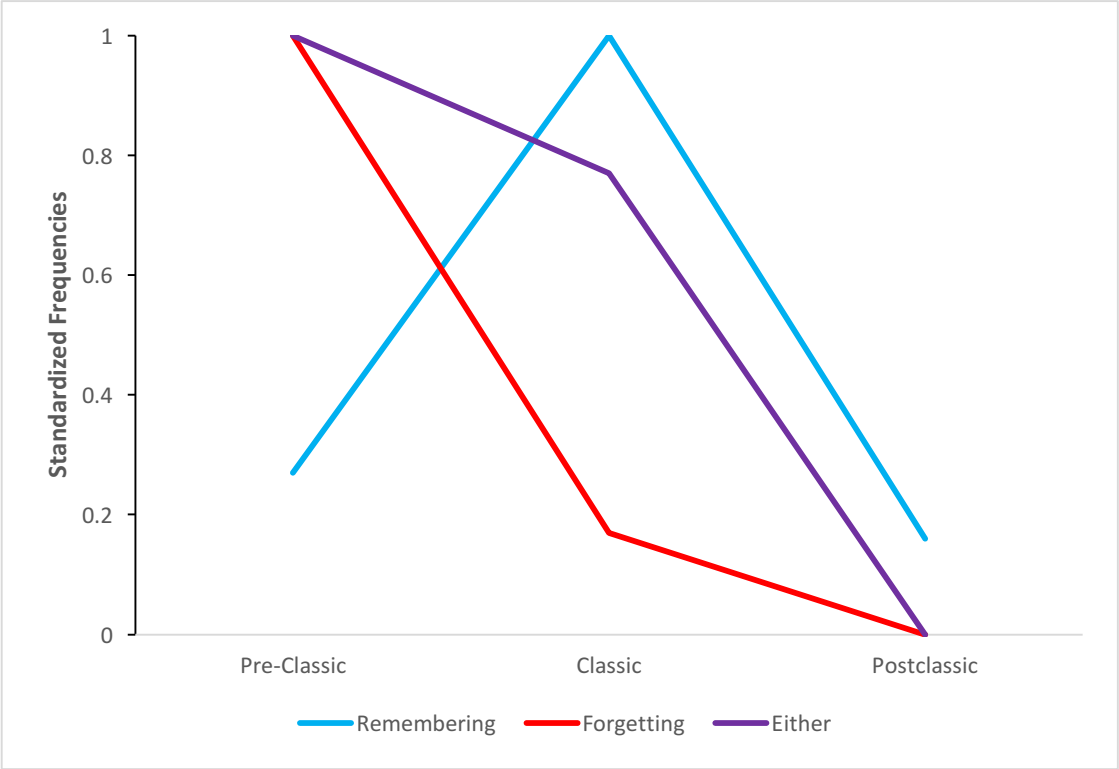

Figure 7.15. Standardized line graph of combined memory measures through time for all room blocks of Galaz. Remembering activities are in blue, red denotes forgetting behaviors, and purple represents activities that are either/both remembering or forgetting given the context.

Figure 7.16 shows how the founding group in the North room block compares to the others at Galaz. In terms of remembering, even though the North room block did not have the highest instances before the Classic period, they certainly did by the Classic period. The Southeast room block likewise increased during the Classic period but nothing compared to the amounts of superposition and intrusive burials at the North room block. Interestingly, the Southwest group started with higher frequencies of memory activities that decreased as time went on. Both the North and South room block continued memory performances into the Postclassic through intrusive burials and superpositioning respectively. The southwest room block does not have a

substantial Postclassic occupation. During the Classic period, the memory making and maintenance activities of the North room block lineage group were unparalleled at Galaz and perhaps at any other site. This is the best evidence I have for a founding group that displayed their ancientness before the Classic period, but most frequently displayed it during the Classic period at the height of population and occupation of Galaz. Thus, the overall narrative of Galaz is earlier marked by one of remembering and forgetting (Figure 7.15). However, during the Classic period there were moments when previously forgotten places on the landscape were re-remembered and reclaimed.

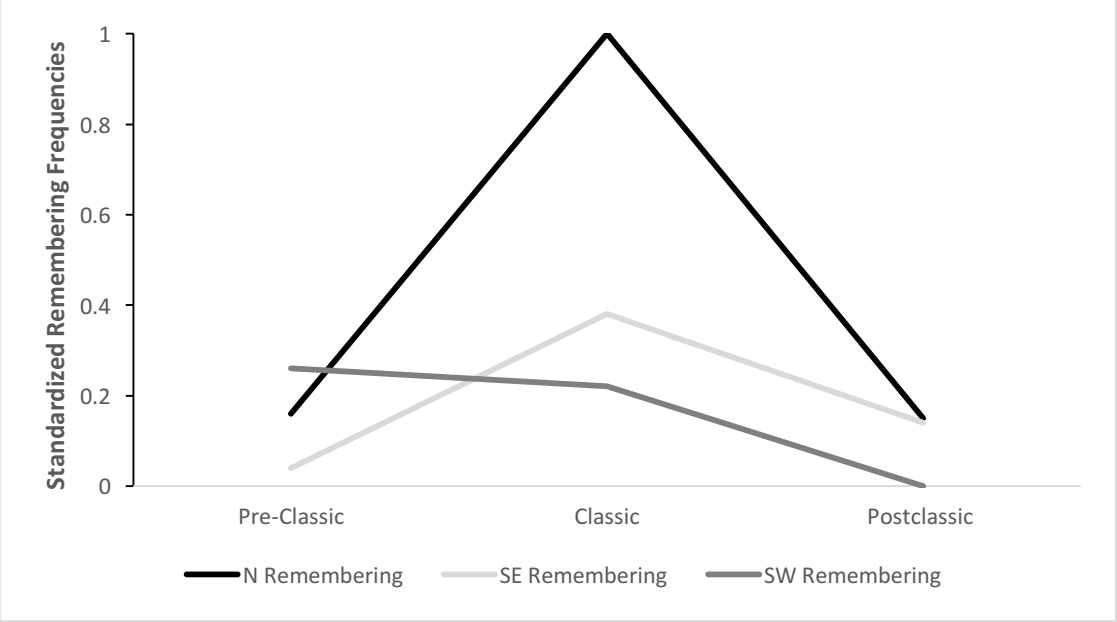

Figure 7.16. Standardized line graph of remembering for all the Galaz room blocks through time. The North room block is represented in black, light gray is for the Southeast, and dark gray denotes the Southwest room block.

Mattocks

As the 300s and Southeast room blocks contain data from only one room each, their narratives are short on details. The only instances of remembering for the founding Southeast room block are the seven intrusive burials placed during the Classic period into the earliest structure on the site. As the one room associated with but isolate from the 300s room block is Classic, the remodeling, cleaning, and filling also took place during this period. I use these two areas in the site comparisons but not room block comparisons due to the small sample sizes and general lack of data. Therefore, I will mostly focus on the constructed narratives and interpreted narratives of the 100s, 200s, and 400s room block.

100s room block. Like other room blocks and other sites, both occupational and post-abandonment remembering increase through time and are represented by the same line (Figure 7.17). However, unlike other sites, the activities relating to forgetting increase alongside the abandonment remembering and/or forgetting activities are also represented by the same line. While occupation remembering and abandonment remembering and/or forgetting increase through time, abandonment remembering decreases. When lumped together, remembering, forgetting and both remembering and forgetting increase through time (Figure 7.18).

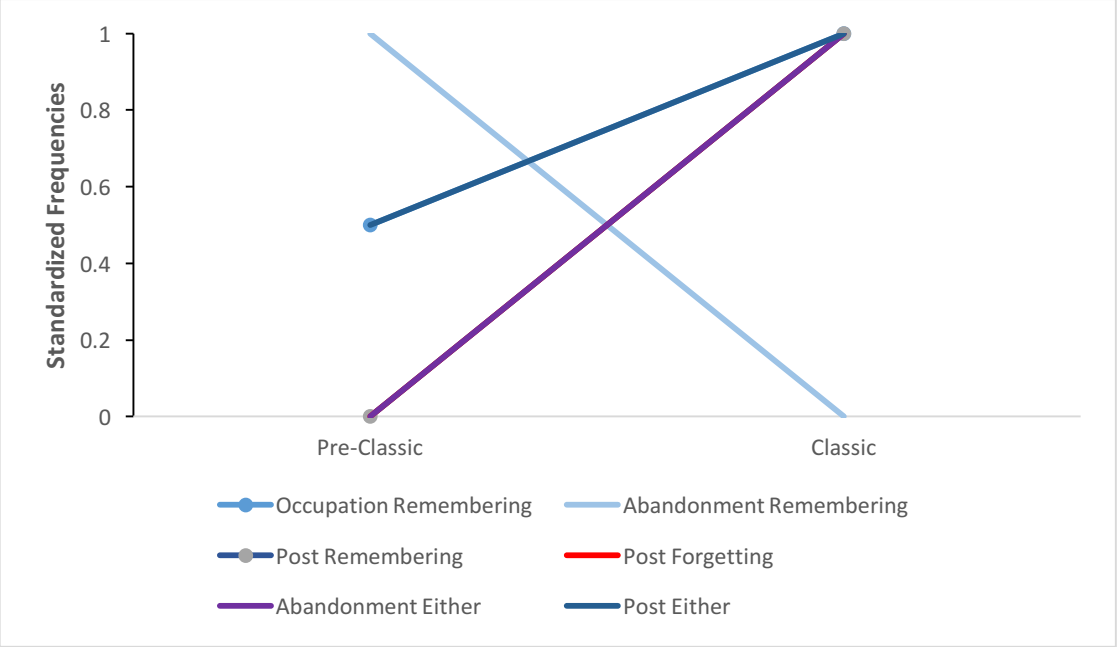

Figure 7.17. Standardized line graph of memory measures through time for the 100s room block at Mattocks. Remembering activities are in shades of blue, red denotes forgetting behaviors, and purple represents activities that are either/both remembering or forgetting given the context.

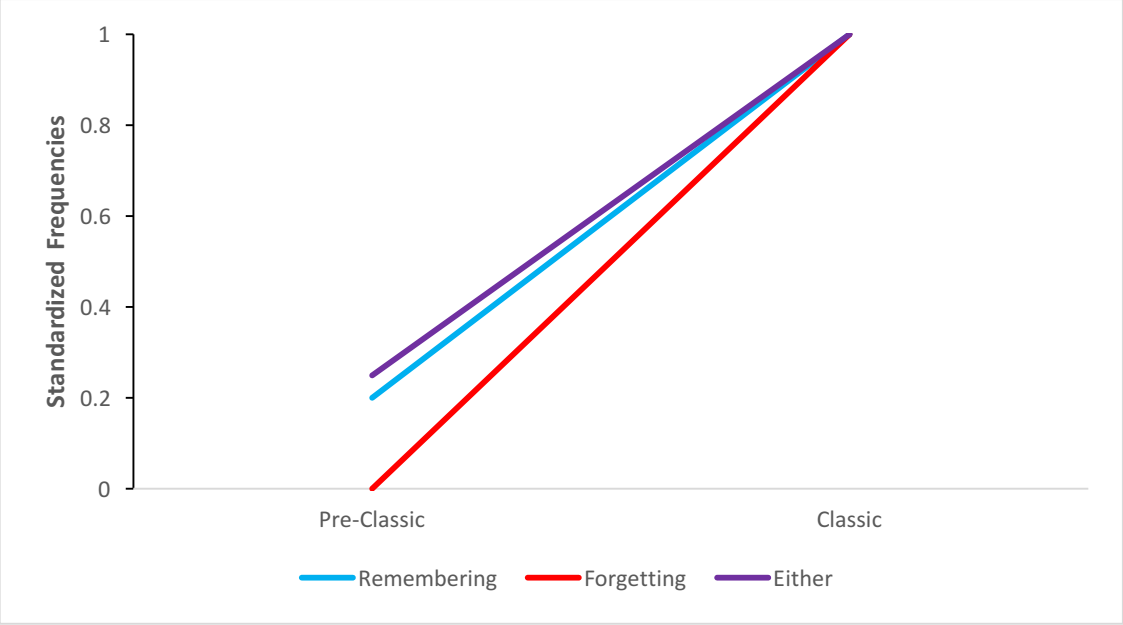

Figure 7.18. Standardized line graph of combined memory measures through time for the 100s room block at Mattocks. Remembering activities are in shades of blue, red denotes forgetting behaviors, and purple represents activities that are either/both remembering or forgetting given the context.

200s room block. As the founding room block and lineage, the narrative of this room block should be different than others. This is not quite the case. As Figure 7.19 illustrates, while both occupation and post-abandonment remembering increases, so too does forgetting. However, unlike the 100s room block, the ambiguous either/both remembering and forgetting category does not increase during the Classic period (Figure 7.20). Similarly, the memory practices start at a higher level of frequency before the Classic than they do the 100s room block.

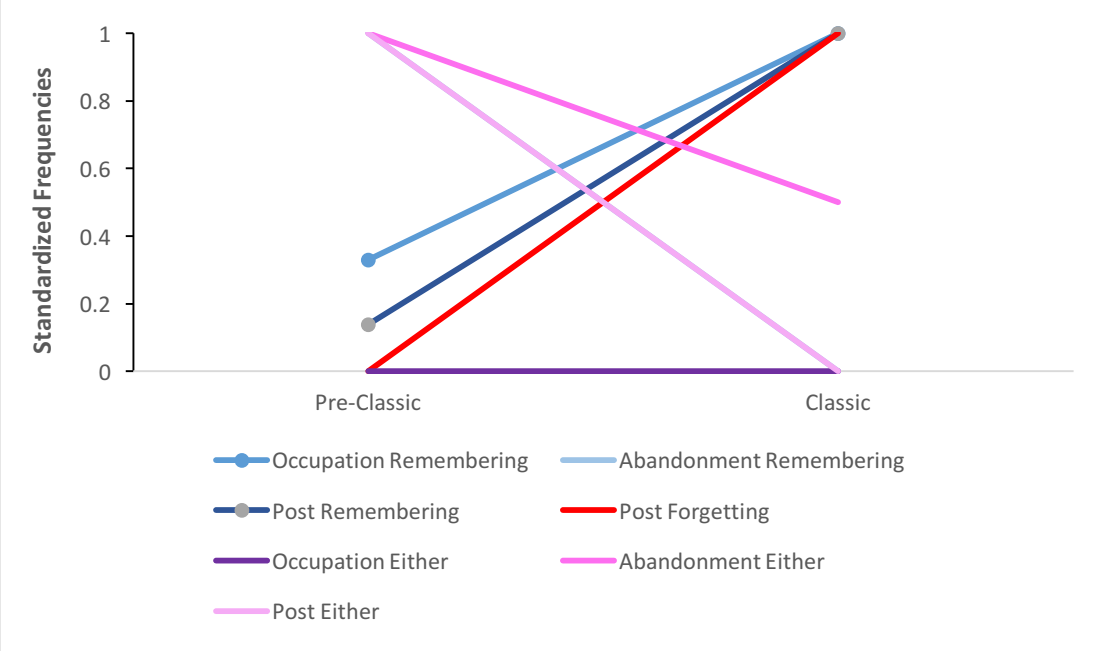

Figure 7.19. Standardized line graph of memory measures through time for the 200s room block at Mattocks. Remembering activities are in shades of blue, red denotes forgetting behaviors, and purple represents activities that are either/both remembering or forgetting given the context.

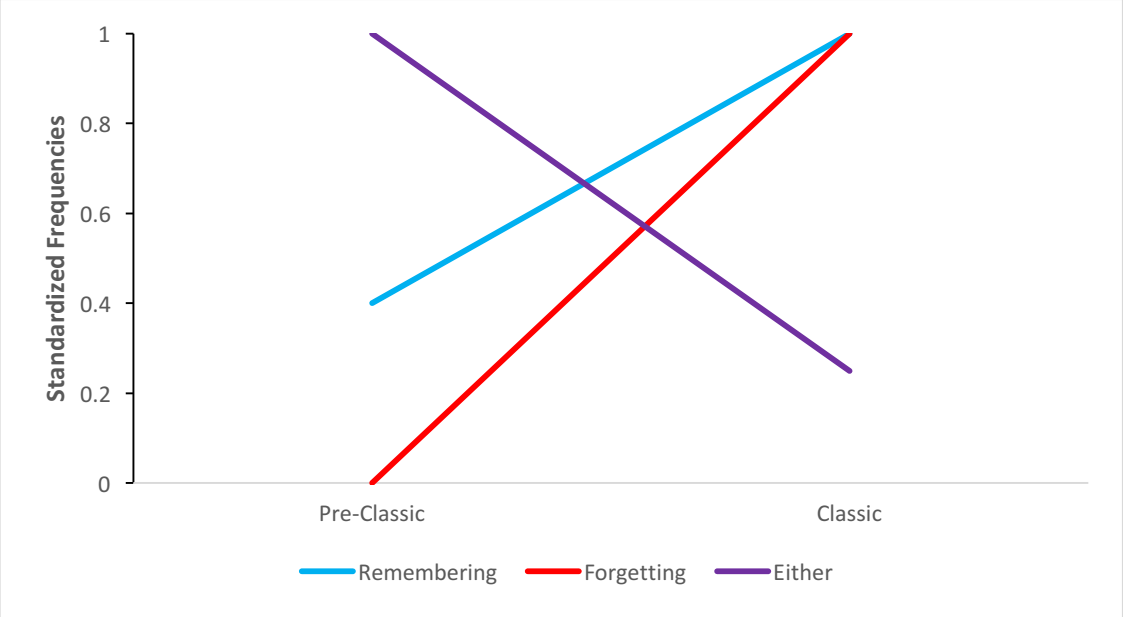

Figure 7.20. Standardized line graph of combined memory measures through time for the 200s room block at Mattocks. Remembering activities are in shades of blue, red denotes forgetting behaviors, and purple represents activities that are either/both remembering or forgetting given the context.

400s room block. In keeping with the non-conforming patterns of the other room blocks, the 400s room block suggests another interesting narrative. As the 400s room block was constructed during the Classic period, it is not illustrated through time with a line graph, but frequency of memory practices during this period is interesting. There are many instances of intrusive burials, burial removals, pre-room burials, multiple floors and remodeling, burning, trash and filling of abandoned rooms. Clearly, the residents of this room block were attempting to augment their lack of Pre-Classic ties to the site by making sure that there was great continuity during their occupation from generation to generation.

The Mattocks site presents a puzzling picture, no doubt complicated by the relative lack of earlier structures, only two of which are superimposed by the 100s and

200s room blocks respectively. It is thus no surprise that every measure increases during the Classic period (Figure 7.21). Forgetting as a stand-alone category was non-existent before the Classic.

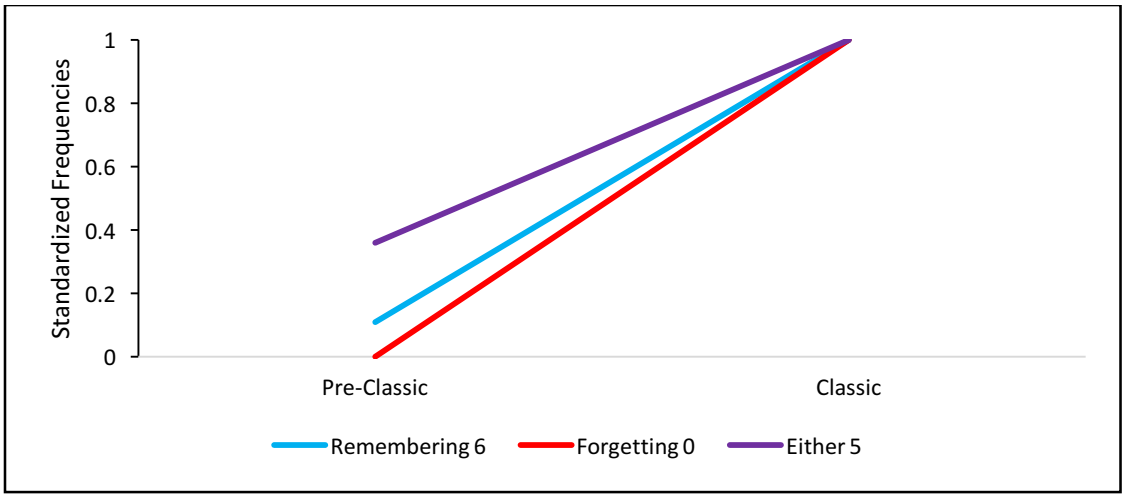

Figure 7.21. Standardized line graph of combined memory measures through time for the 400s room block at Mattocks. Remembering activities are in shades of blue, red denotes forgetting behaviors, and purple represents activities that are either/both remembering or forgetting given the context.

When all the room blocks are compared in frequencies of remembering only, some interesting patterns emerge. Initially, the 200s room block begins with the most remembering during the Pre-Classic period and slightly increases the frequency of remembering practices during the Classic occupation of the site (Figure 7.22). This is to be somewhat expected as the room block is presumably the locale of a founding lineage. The 100s room block begins with slightly less initial remembering, but by the end of the Classic has levels the same as the 200s room block. The 400s room block patterns are quite interesting and may indicate an imagined or invented history because there were no actual ties to this place at an earlier time. The huge rise in frequency of remembering activities dominates those of any of the other room blocks.

Perhaps the newer residents who constructed this room block were making up for their lack of antecedence or even parodying the lineage histories and narratives of other room blocks.

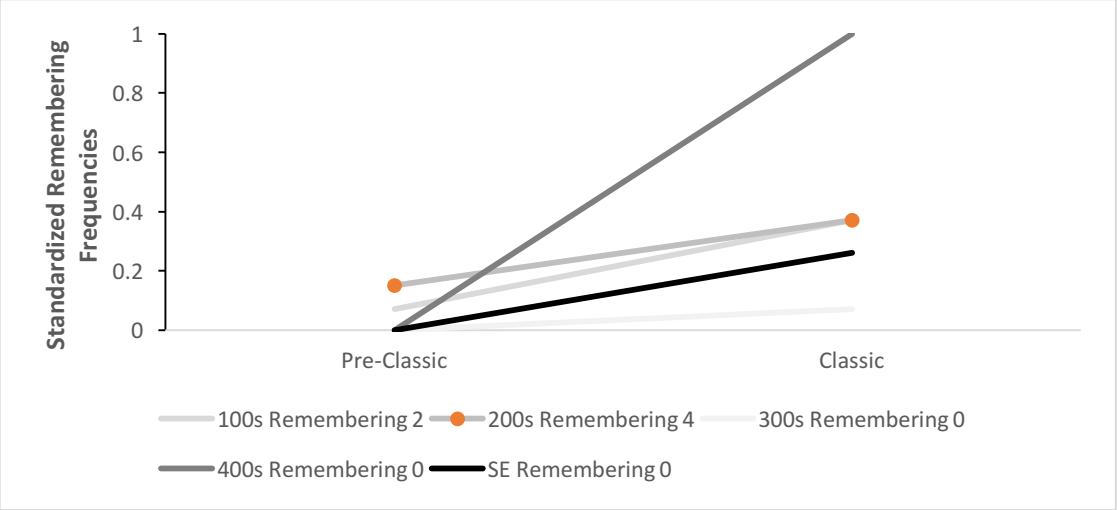

Figure 7.22. Standardized line graph of only remembering for all the Mattocks room blocks through time.

Measures of Antecedence Concerning Memory Visibility and Reclaimed or Invented Pasts

As the above narratives across time and space attest, founding lineages or corporate groups were not always performing the highest frequency antecedence and remembering activities either before or during the Classic period. At Mattocks, the 200s room block contains the most Pre-Classic memory, but the founding Southeast and 400s room block inhabitants perform antecedence more during the Classic period. At NAN, both the non-founding East and South groups perform remembering and antecedence more than the founding Southeast group during the Classic. The North room block at Galaz, whose inhabitants were descendants of founding households and performed the most remembering activities, although they do not have the most Pre-

Classic remembering. Perhaps it was not necessary to display this quality before the Classic when sites were occupied by fewer groups. Regardless, the uptick in frequency of these activities for nearly all locales of all three sites during the Classic needs to be further interrogated. We can do so in two ways - by comparing the frequencies of Tier one commemorative memory practices between room blocks (Table 7.1) and by examining the contexts of intrusive burials. Are they in rooms that are superimposed and/or contain burials that date to the occupation of the structure? I conceptualize intrusive burials in the former context to possibly indicate a reclamation of the past through old or existing links, while the latter may suggest new, invented, or imagined links with past places or groups that may or may not be actual affiliations. Is there a certain passage of time when any old or abandoned places can be used to construct or strengthen the antecedence claims of a group?

Beginning with the frequency of commemorative practices, it is interesting that only one founding room block's inhabitants performed these highly visible practices with greater intensity during the Classic period. As seen in Figure 7.23, the standardized line spikes during the Classic period for the founding North room block, while it somewhat increases for the Southeast room block and actually decreases for the Southwest room block at Galaz. The North room block is the only founding group from all three sites to maintain their antecedence through these most visible practices. Similar to Galaz, the line representing the East room block at NAN Ranch increases dramatically during the Classic period, as does the line representing the South room block, although to a lesser extent.

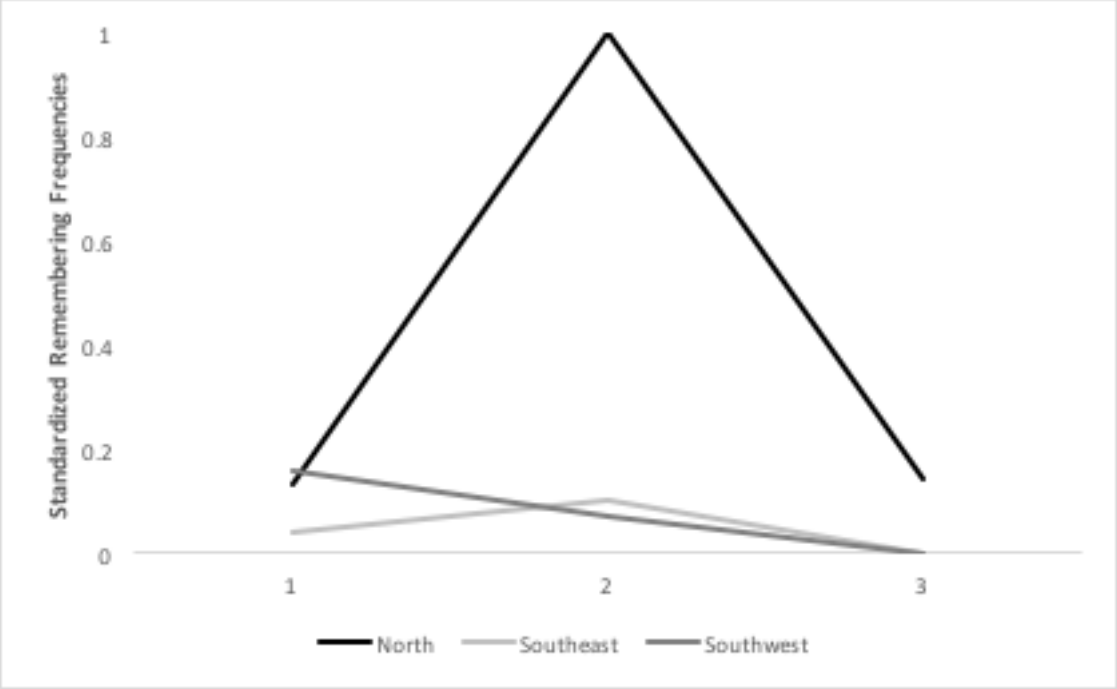

Figure 7.23. Standardized line graph of commemorative Tier 1 memory measures for Galaz.

Interestingly, and unlike Galaz, the founding Southeast room block at NAN Ranch actually decreases in these measures relative to the other room blocks at the site (Figure 7.24). Thus, the founding group was not as active in remembering as the East room block at NAN Ranch during the Classic period. Either they did not need to display their antecedence to other community members, or, and more likely, their past was overwritten by the much more frequent and visual practices of inhabitants in the East room block.

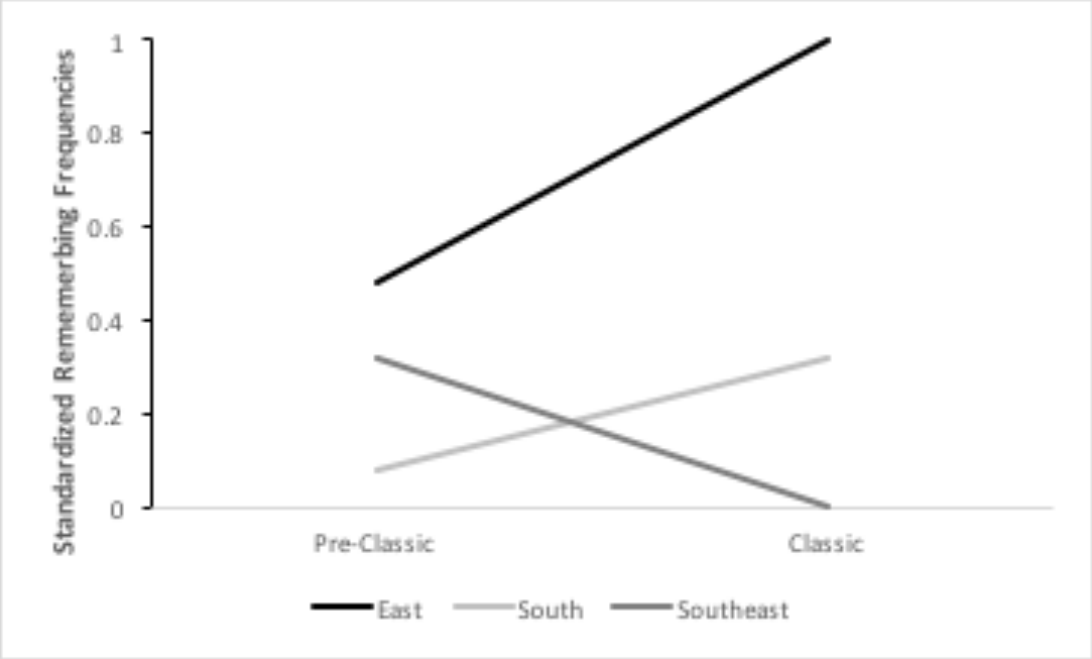

Figure 7.24. Standardized line graph of commemorative Tier 1 memory measures for NAN Ranch.

The results of this analysis of commemorative measures for the Mattocks site provides another interesting pattern (Figure 7.25). Inhabitants from all room blocks except the 200s increased the frequency of these practices during the Classic period. The founding Southeast room block contains the highest number, followed closely by the 400s room block. We might expect to see the Southeast inhabitants and those descendants of the group that built the oldest structure to be invested in maintain their displays of antecedence as Southeast room block members do, but the 400s room block is a little surprising. The 400s room block contains no superposition and may have been constructed later than either the 100s or 200s room block, but yet its inhabitants are attempting to demonstrate ties to place in very visible ways. The 400s room block may be the best case for a group inventing antecedence or parodying or contesting the primacy of others. Equally surprising is that the other founding room

block, the 200s, only slightly increases in these memory practices through time. Perhaps like the Southeast room block at NAN Ranch, memory practices were not important to the inhabitants of the room block, or others were more successful at overtly creating and displaying their own ties to places of the past.

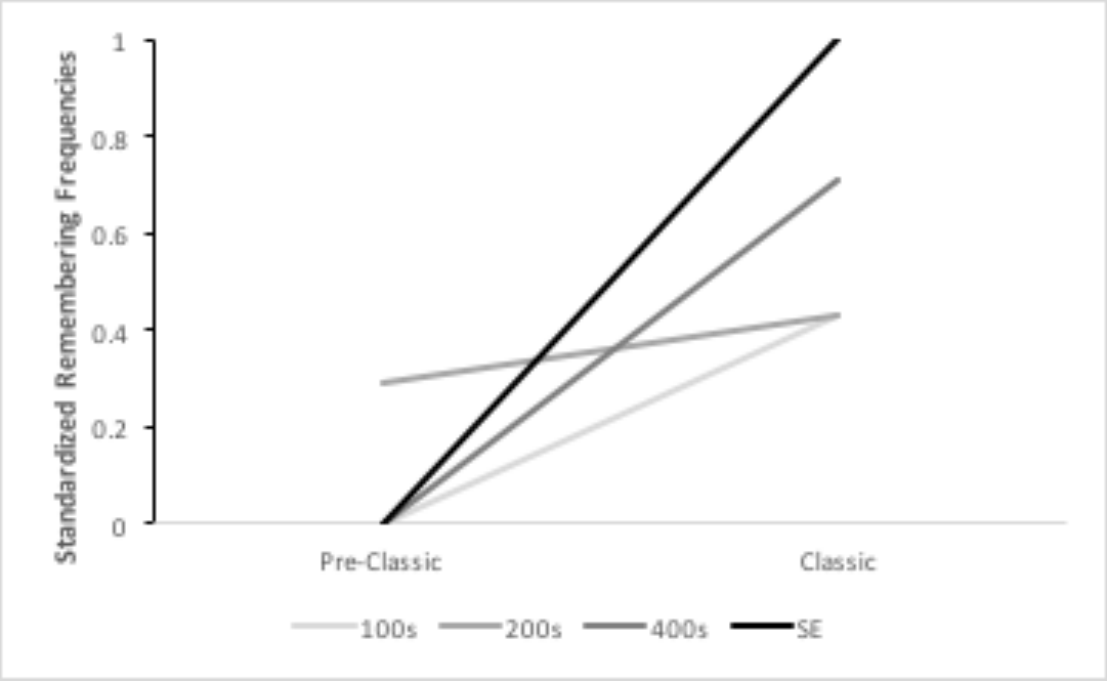

Figure 7.25. Standardized line graph of commemorative Tier 1 memory measures for Mattocks.

In order to tease apart the likelihood of certain post-abandonment memory practices as outcomes of reclaimed or invented pasts, it is also helpful to examine burial contexts. I assume that intrusive burials placed in contexts with other earlier burials, in superimposed contexts, and in ceremonial structures suggest an existing relationship with these places. If a relationship exists, then memory practices can be interpreted as moments of remembering and reclaiming places of the past for present needs. If relationships or continuity with those intrusive burial contexts are not well

established, then we may infer that those practices may be inventions or exaggerations of ties to those places and thus to antecedence claims.

At the Galaz site, the correlation between intrusive burials in contexts already used as depositories for the dead, in superimposed contexts, and in ceremonial contexts could not be stronger. Figure 7.26 shows that all the intrusive burials in the North room block, which consists of the majority of the total intrusive burials for the site, are in superimposed ceremonial contexts with other burials present. Only two burials are not in ceremonial contexts. As this locale is one constructed by a founding family, I argue that this group claimed and reclaimed their past during the Classic and Postclassic periods instead of inventing their antecedence. The pattern is less clear for both the Southeast and Southwest room blocks. While most of the Southeast intrusive burials are in contexts with other burials, most are not in superimposed contexts, and about half are in ceremonial rooms. The intrusive burials in the Southwest room block are all in rooms with other burials, but most are not in superimposed contexts, and none are present in ceremonial rooms. The lack of correlation for either superimposed rooms, ceremonial rooms, or rooms with other burials for the Southeast and Southwest room block contrasts with the correlation for all three in the North room block.

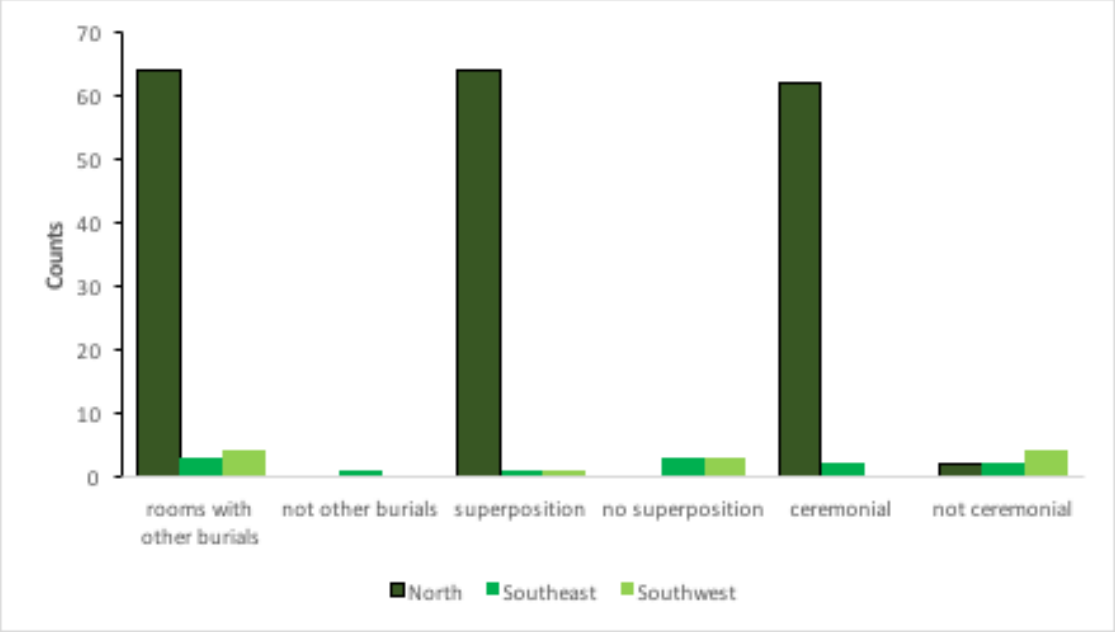

Figure 7.26. Bar graph comparing the contexts of intrusive burials among room blocks at Galaz in terms of the presence or absence of other extant burials in rooms, whether they are superimposed or not, or located in rooms that functioned as ceremonial or communal areas.

Unlike Galaz, there is no clear room block or blocks at the NAN Ranch site that might be considered as a group reclaiming their past (Figure 7.27). For example, the East room block contains intrusive burials present in rooms with other burials about half the time. Most intrusive burials are in superimposed contexts, but very few (n=4) are in ceremonial rooms. Most of the intrusive burials from the South room block are in rooms with other burials, but only half are in superimposed contexts, and none are present in ceremonial rooms. Surprisingly, for the founding Southeast room block, most intrusive burials are not present in rooms with other earlier burials, and none are in ceremonial rooms, although they are all in superimposed contexts. The variability in

each of these contexts for each of the three room blocks suggests that there is both continuity and discontinuity in the affiliation and use of these places through time.

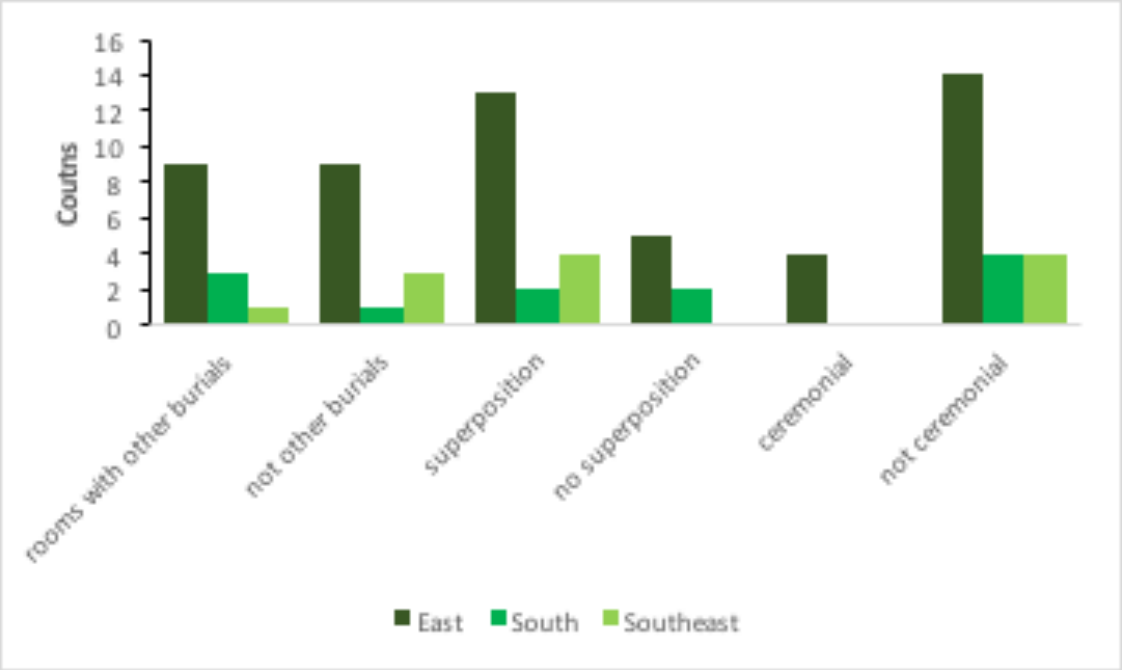

Figure 7.27. Bar graph comparing the contexts of intrusive burials at NAN Ranch among room blocks in terms of the presence or absence of other extant burials in rooms, whether they are superimposed or not, or located in rooms that functioned as ceremonial or communal areas.

Lastly, the room blocks at the Mattocks site also suggest more variability in the contexts than those seen at Galaz (Figure 7.28). The founding Southeast room block contains the most intrusive burials and burials of a much later date than the structure into which they were placed, but none are in contexts with other burials or in superimposed or ceremonial rooms. That is to say, there is no continuity with that Southeast space, and there is a real risk that those burials placed intrusively can be interpreted as invented rather than reclaimed ties to ancestral places. All of the other room blocks at Mattocks have intrusive burials in similar habitational contexts. Very

few are in superimposed contexts, most likely due to the overall lack of superposition at the site. Most are placed in rooms with other burials, and very rarely are these rooms of ceremonial importance.

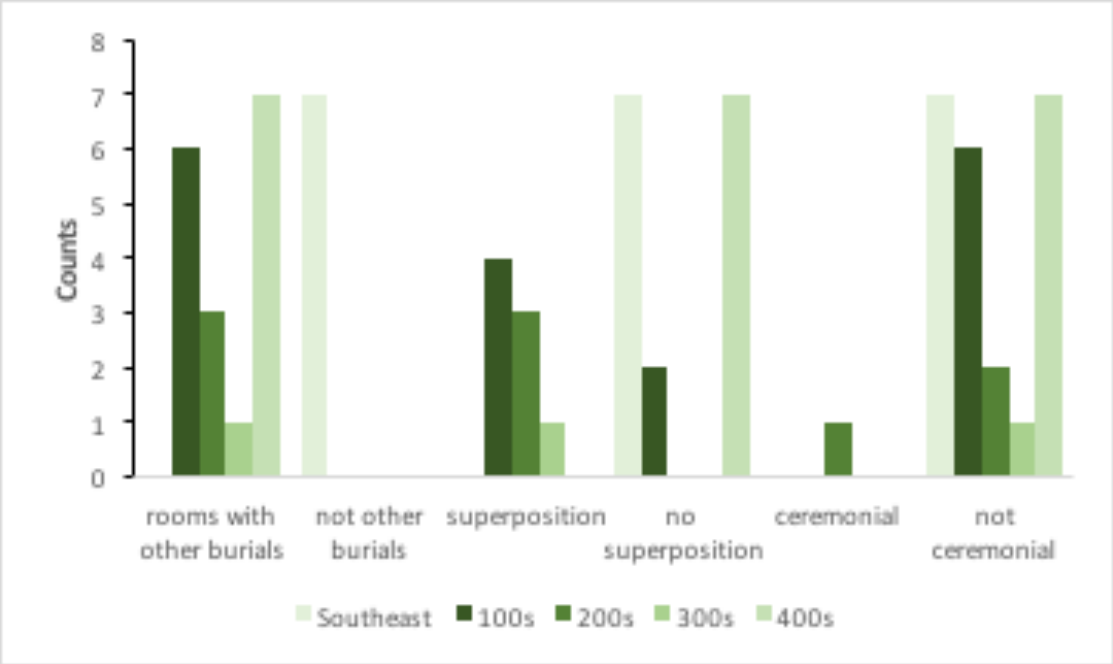

Figure 7.28. Bar graph comparing the contexts of intrusive burials at Mattocks among room blocks in terms of the presence or absence of other extant burials in rooms, whether they are superimposed or not, or located in rooms that functioned as ceremonial or communal areas.

Part II: Arguments and Observations

Argument 1

The first argument that I proffer, is that, founding families and other not-founding families display real, imagined, or exaggerated antecedence throughout time. All groups claimed ancestral space and referenced their roots or ancientness. Founding groups only occasionally corresponded to high frequencies of continuity in habituated and commemorative activities in their performances of ancientness. This lack of display by founding groups may be because they have a known history and do not

need to perform it as other non-founding groups who have to invest more to demonstrate their claims of space through antecedence. The above argument holds for both Galaz and NAN Ranch during the Pre-Classic period and the Classic period at Mattocks and NAN Ranch.

Interestingly, only one of the three sites initially practiced overt ties to earlier places during the Pre-Classic period. At Mattocks, the probable founding household in the 200s room block did perform the highest frequency of practices related to remembrance of earlier occupations (Figure 7.22). Unlike the founding room block at Mattocks, neither the Southeast room block at NAN Ranch nor the North room block at Galaz had the highest initial frequency of remembering (Figure 7.16 and 7.8 respectively), which supports the notion that groups with known histories no not have to invest in the displays of those histories as much as other groups. Indeed, none of the recorded intrusive burials in the founding Southeast room block at NAN Ranch date to a time prior to the Classic. In the Pre-Classic period, it may not have been necessary to display antecedence, or it was displayed at the community scale such as through the four burials placed intrusively into the Great Kiva 52 at NAN Ranch.

Although antecedence (real, invented, or exaggerated) appears to be much more necessary to display in the Classic period for all three sites, this memory process involved virtually all room blocks at each of the sites and not only those considered to be the homes of founding groups. For example, although the 200s room block at Mattocks initially was invested in displaying antecedence, the group actually decreased their frequencies of remembering activities during the Classic period (Figure

7.25). Concomitantly, the inhabitants of Southeast room block at Mattocks that had no recorded memory performances prior to the Classic period then buried seven individuals in the oldest structure at the site. Further, the inhabitants of the 400s room block, with no earlier occupations to reference, practiced memory through continuity to earlier Classic rooms at rates similar to the Southeast group (Figure 7.25). Thus, it appears that, at Mattocks, one of the founding groups displayed antecedence prior to the Classic but did not really participate at levels similar to its neighbors during the Classic period. Instead, one of the most recently arrived groups that constructed the 400s room block was heavily committed to referencing their ties and continuity to the past, even though that past was relatively recent. After a longer period of discontinuity than that faced by those that dwelt within the 400s room block, the inhabitants of the Southeast group re-claimed the earliest Georgetown age structure during the Classic period. The intrusive burials present in the Georgetown Pithouse 80b do represent the greatest time difference between the burial event(s) and the occupation of the structure among the three study sites.

Comparatively at NAN Ranch, the inhabitants of the East room block continued to be highly invested in displaying antecedence during the Classic period even though they were most likely not descendants of the founding members (Figure 7.24). Again, like the 200s room block at Mattocks, the residents of the founding Southeast group at NAN Ranch at best maintained the same level of continuity with their past during the Classic period as they had during the Pre-Classic period (Figure 7.14), and at worst

declined this continuity when directly compared against the standardized frequencies for all room blocks (Figure 7.24).

However, during the Classic period, one group belonging to a founding room block does exert much effort in displaying their antecedence. The inhabitants of the founding North room block at Galaz clearly were more invested in demonstrating their ties and continuity to the past than other room blocks, through the sheer volume of intrusive burials and architectural superpositions (Figure 7.23). Surprisingly, the North room block is the only example from the three sites of a founding room block being associated with the highest frequency of practices related to antecedence displays during the Classic period. This pattern suggests either that all other groups were constructing their own histories of each other through their own renegotiations with places of the past, which contributed to the involvement and variability among the rest of the room blocks.

Argument 2

My second argument states that there is a temporal break during the Classic period when inhabitants of sites and some room blocks practiced remembering at much greater frequencies than before. Similar activities of remembering may differ in the way memory is performed and the level of intimacy a group had with past places, peoples, and events. Generally, the increase, observable in the line graphs above in Part I (Figures 7.1- 7.25), suggests that memory is practiced and displayed in more visible ways for most sites during the Classic period. The burials in NAN Ranch's Great

Kiva 52 during the Transitional phase and the Southwest room block at Galaz are the only Pre-Classic exceptions.

Perhaps the rise in frequency of memory activities is an outcome of larger residential populations in which more groups participated in these memory performances, and founding groups stepped up to not allow other groups to subvert their group narrative and history. Consequentially, the Classic period increase in memory is at the expense of forgetting and presumes that there were earlier structures in the Pre-Classic period that were available and not used until or during the Classic period. I interpret the Classic period to be a moment of large scale remembering regardless of previous discontinuity with places of the past.

This is a robust pattern of increase in remembering during the Classic period present at all sites. For the Galaz site, the most obvious support for this temporal shift comes from the over 65 Classic intrusive burials and the large number of Classic and Postclassic superpositions. It is unclear if the number of these references to earlier places was in response to other groups, but regardless, the North room block dominated the overall performances through sheer frequency.

At the NAN Ranch site, inhabitants of all room blocks including the Southeast with the smaller Classic occupation that the East or South room blocks, increase the frequency of these practices or maintain Pre-Classic levels, as is the case for the Southeast room block. Maintaining continuity was clearly still a priority for the founding Southeast group during the Classic period as evidenced by their architectural superposition and Classic intrusive burials. This aim is best displayed through the

placement of two Classic burials in the second oldest structure at the site, thus creating a gap of three architectural phases. The levels of the East and South room block memory performances suggest they were also heavily invested in maintaining or exaggerating their relationships to the past.

Inhabitants of all the room blocks at Mattocks are likewise participating in remembering during the Classic period. However, the peoples of the 200s, arguably a founding room block, did not perform and display the most visible commemorative activities as much as of those in the Southeast and 400s room blocks (Figure 7.25). Despite being only occupied for a few generations (Gilman and LeBlanc 2017:242), and despite having no occupation during the Pithouse period, the inhabitants of 400s room block were heavily invested in exaggerating their own ancientness and newer ties to place.

I can explain this rise during the Classic period in the frequency of practiced remembering in two ways. One is that the rise in population documented for the Classic period (Minnis 1985) resulted in a landscape with the foundation for social inequality through competition for prestige and resources. This explanation is supported by the fact that virtually all room blocks participated at memory levels much higher than during the Pithouse period. The only exceptions are the Southeast room block at NAN Ranch and the Southwest room block at Galaz. Further support for this argument includes the participation of non-founding room blocks in addition to the founding locales. Maybe this is why there is variability in the manner in which some practices are performed at greater temporal or stratigraphic depths.

Equally plausible and supported by the same lines of evidence is that overt competition did not really play a role in the interaction of narratives, generations, and peoples on the landscape. Perhaps the rise during the Classic period of these memory practices only came from a need for each group to have their own histories as part of the process of finding oneself by referencing one's own biography. In this scenario, shared social memory serves as a stabilizing factor for corporate groups (Roth and Baustian 2015:454). Thus, when populations were lower, it was less necessary to distinguish one's group from others. I also like the concept of parody (Bahr 2001) to help explain the nature of these memory landscapes. According to Bahr (2001:587), each people's telling of ancientness was a parody or playful and compassionate version of its neighbors' telling. Parodies thrive on intended but unadmitted differences (Bahr 2001:605).

This concept of parody might help explain the variability in the manner, depth, and intimacy in which some of these memory activities were performed as efforts to slightly distinguish one group from its neighbors. Intrusive burials can be placed at varying depths below the fill levels and into or beneath the original floors. Yet some intrusive burials placed within interior core rooms would not have been accessible or visible to one's neighbors. Therefore, one could do things slightly differently than one's neighbors without really admitting or demonstrating those differences. Similarly, special attention is often given to the earliest structures or earlier ceremonial structures by founding groups at Galaz (North), NAN (Southeast), and Mattocks (Southeast). I wonder if the references made to the earliest or oldest structures at a

site, is merely a function of location, with some groups having access to a longer past than others. Or do the references relate to the long length of time that has passed. Specifically, has enough time passed that individual ancestors cannot be associated with those places, opening them up to wider interpretations of mythical ancestors for members of the whole community? Are these instances of the transition from histories to mythologies (Bahr 2001:590), or to texts that not all community members believe? Regardless of how we explain the rise in social memory and antecedence displays in the Classic period, clearly there is a desire for many groups to make the present alongside and equivalent with the past (Gillespie 2008:115).

Argument 3

My last argument concerns the Galaz site in particular. The memory performance at Galaz is different, possibly at a different scale, and may relate to the ceremonial importance of the site. The North room block at Galaz is the best evidence for a founding group maintaining and dominantly displaying its real primacy or antecedence through the landscape across time. One could also argue that the over Classic period into Great Kiva 42A involved both the living and dead from other room blocks and may have been a memory practiced at the community scale. Lastly, Galaz is the only site with a substantial Postclassic occupation and continuity in memory performances. All of these differences may relate to the presence of ritual leaders and the preeminence of site as a ceremonial center for many nearby communities (Creel and Anyon 2003). The support for this multifaceted argument is discussed in the following paragraphs.

The Galaz site has the highest memory total of combined measure frequencies of the three sites. Over half of all the memory instances come from Galaz alone, with NAN Ranch and Mattocks having roughly similar totals. Much of this is inherent in the 69 total intrusive burials, nearly all (n=61) of which came from a single ceremonial great kiva in the North room block. Before these Classic interments, Great Kiva 42A was used sparingly as a mortuary repository and contained only two burials below the floor consistent with the time of its occupation.

The robust pattern of remembering in the North room block at Galaz equally supports an explanation of the heavily invested nature of the North room block corporate group, and that of memory making or re-writing for a larger group. Both the corporate and communal scales of memory display would involve both genders and multiple age groups. Intrusive burials in ceremonial structures, presumably owned by a group (Gilman and Stone 2013), are a very visible display of either corporate group antecedence or community heritage in addition to household and corporate group ties to the past and to past places. If the former communal scale, and if the kiva was owned by the northern corporate group (Gilman and Stone 2013), then this pattern suggests an overkill display of lineage connection to the past and places of ritual knowledge and performance. Indeed, the line graphs of the Southwest room block of Galaz (Figure 7.29), indicate it was not participating much in displays of antecedence or continuity with the past during the Classic period. The inhabitants of the Southeast room block, on the other hand, did increase their remembering through time. Interestingly, even Galaz was affected by the temporal shift in frequencies during the

Classic period. Lower frequencies for the Pre-Classic period even for the North room block at Galaz suggest that before the rise in population during the Classic period, it was not as necessary to perform post-abandonment remembering or more visible forms of memory to establish or legitimize one's ties to place.

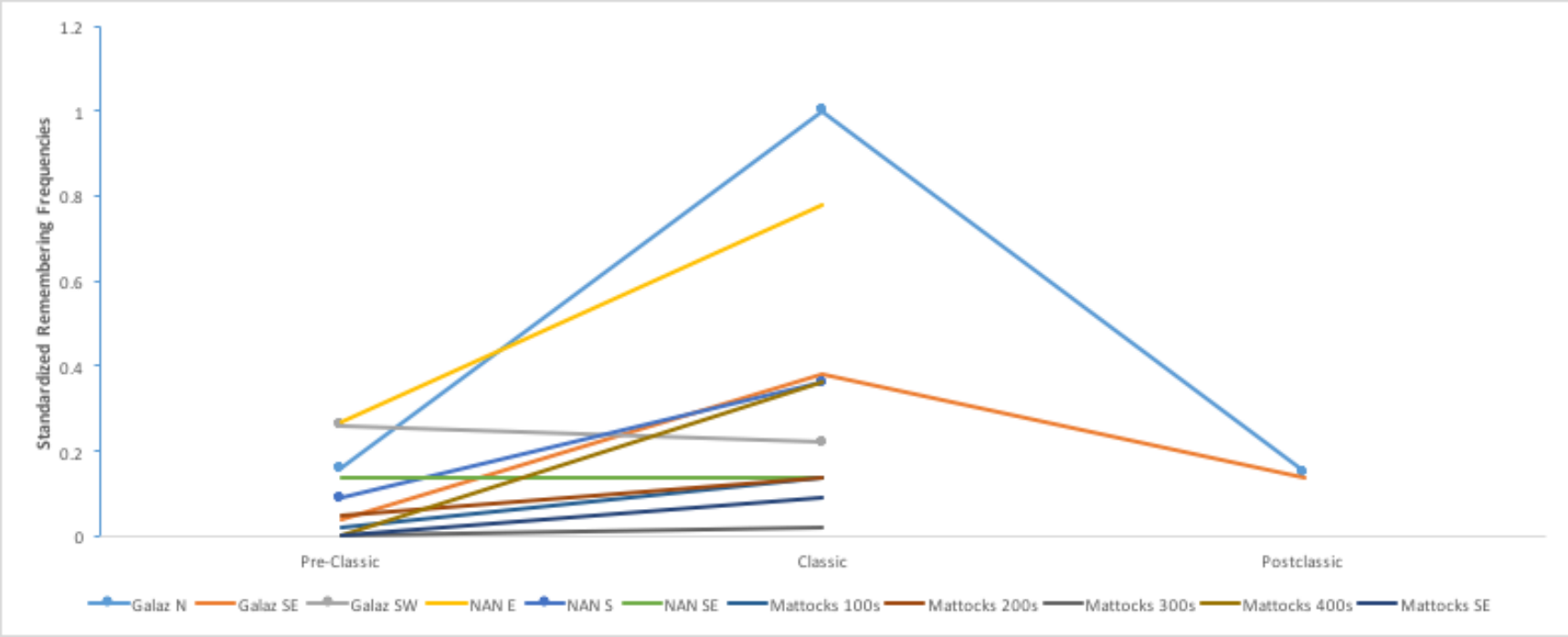

Figure 7.29. Standardized line graph of instances of remembering, comparing each room block at each site.

The Galaz site and its North room block are the only locales where burials are missing crania, although crania-only burials are present in the Southeast room block. Again, this most likely is related to the presence of ritual leaders at the site, as evidenced by secondary burials associated with the floors of earlier ceremonial structures (Creel and Anyon 2003). These elemental removals are similar to the practice of skull removal and household display of ancestors described in Turkey (Hodder 2006; Kujit 2011).

The results of my analysis for Galaz suggest it more likely than the other two sites to demonstrate overall continuity between generations. Indeed, my results for Galaz demonstrate a robust correlation of intrusive burials in superimposed contexts and in locales with earlier burials. Because there was no break in the continuity between architectural phases in the Pre-Classic and Classic periods, it is presumably a performance of social memory that corresponds to some "real" affinity rather than an invention or exaggeration of ties to places of the past. For example, all of the intrusive burials interred in the North room block of Galaz are within rooms that either superimpose earlier ones or had rooms constructed above them, and all of these rooms contain existing burials placed during the occupation of the space. Further, one of the Classic intrusive burials in Great Kiva 42A was placed through the fill beneath the original floor suggesting not only great effort expenditure, but also great knowledge and intimacy with the past structure. Also, the presence of a Boldface style vessel accompanying one of the Classic burials (Burial 15-157, Anyon and LeBlanc 1984:406-407) may indicate an heirloom interred with the individual, further blurring

the line between the past and the then present. These patterns do not characterize the other room blocks, suggesting that the narrative(s) of the founding family constructed before, during, and after the Classic dominates and prevails regardless of the time period. Of all the room blocks, the North one at Galaz most closely resembles the "history houses" described by Hodder and Pels (2010). There is great reuse of space through high frequencies of re-flooring, remodeling, and interring many individuals into earlier rooms over generations.

This pattern of dominance and continuity continues in the Postclassic period with intrusive burials in ceremonially important Rooms 15 and 84. Room 15 is a corporate kiva superimposed and encompassing a Georgetown structure, and it contains a macaw burial. Room 84 superimposes Great Kiva 42A. It is likely that not all groups abandoned the site due to the similarity in the intrusive burial practices observed in Rooms 15 and 84. Both of these Postclassic rooms were involved in superpositioning and contained previous burials.

The interesting and stark memory patterns for the Galaz site may be somewhat explained by its preeminent role in Mimbres Valley. The site endured into the Postclassic, had more macaws than other sites (Gilman et al. 2014), was a major producer of pottery (Creel and Speakman 2012), and may have controlled valuable agricultural resources (Gilman and LeBlanc 2017:457). Of the three sites studied, the role the site of Galaz played within the larger region would be the most likely candidate for memory performed at the community level. It has no obvious room suites and is located near the convergence of the Mimbres River and a side drainage

forming a natural east-west corridor (Hegmon 2002:337). It is conceivable that many communities were involved in the commemorative making activities performed at Galaz, as the ceremonies at the Great Kiva would have brought in participants from surrounding areas.

Summary

To quickly summarize there is sometimes variability between room blocks concerning how, when, where and with what intensity and manner they performed various activities contributing to social memory-making and less often forgetting. Founding families did not always construct and perform their histories through the landscape. This is true of the Southeast group at NAN and the North room block at Galaz. It may be that because those groups had a known history, it was not always necessarily to display that history through very visible and commemorative acts to others.

It is clear, and especially true for the Classic period, that inhabitants of all room blocks were engaged and invested in activities that cited and made physical references to ancestors or places of the past, whether these links were real, invented, or exaggerated. Again, some groups such as the 400s room block at Mattocks were more invested in displaying antecedence and constructing their own group history than those living in the 100s or 200s room blocks. Others such as the Southeast group at Mattocks re-claimed their space by interring seven individuals intrusively into the oldest structure at the site. Remembering activities after abandonment and Tier 1 commemorative activities increase in frequency during the Classic period at the height

of population for the three sites. The best evidence of this increased investment is the North room block at Galaz. All of the intrusive burials in the North room block are in superimposed rooms that contained other extant burials. Thus, during the Classic period, when over fifty intrusive burials were interred, existing relationships with ancestral places were maintained and strengthened through these meaningful and commemorative acts.

Lastly, Galaz and the memories performed at the site stand out from the other sites in terms of investment of founding groups in displaying antecedence, the use and access of older ceremonial spaces, and the continuity of traditional memory practices beyond the Classic period. The North room block is the only founding group to exert a lot of effort into maintaining and displaying their antecedence or ancientness. Indeed, they did so at a volume greater than any other room block at other sites. Beyond the sheer frequency of the commemorative activities performed by those living at the North room block, they also performed memory through ceremonial places much more frequently than other sites. Only two intrusive burials were not interred in Great or corporate kivas. Either this group had differential access to those places and the activities and memories associated there, or they were performing antecedence at a scale larger than room blocks or corporate groups. As ceremonies for the good of the community and surrounding communities, as is the case for Galaz, were performed in great kivas, it is plausible that other room blocks or sites contributed dead to be interred in those integrative facilities. Both the practice of intrusive burial and intrusive burials in ceremonial rooms are maintained and performed during the Classic

period, suggesting continuity and longevity of some groups in the Postclassic period. Despite the depopulation and changing circumstances of the present at the end of the Classic period, it was still important to perform antecedence and remember the past.

Conclusions

Patterns of changes in frequencies of social memory practices inscribed through the landscape suggest variation in the temporalities of memory performances and the scale. It is clear that complex agendas based on immediate needs created complex and textured palimpsests of activities that added and cut the landscape. I have listed two types of memory (habituated and commemorative) being performed at the supra-household and perhaps community level at Galaz. There is an uptick in remembering and especially in commemorate practices during the Classic period, primarily in more post-abandonment remembering through intrusive burials and architectural superposition.

Inhabitants practiced many memory-making activities for different reasons and at different scales simultaneously. Galaz demonstrates this the best, as room blocks performed their own histories, while also contributing to the construction of a more communal history through the intrusive burials interred in Great Kiva 42A. It may be that enough time has passed since the occupation of those first structures that group memories of specific individuals or events have been forgotten. Therefore, the settlement founders are generalized ancestors to which everyone has access as descendants, and multiple claims can be made (Assmann 2008).

I can state with a certain level of confidence, that some people had long ties of remembering and referencing certain places on the landscape, even if those places are no longer visible from the surface and in a place interaction. The rarity of the burials in ceremonial structures might be indicative of inequality, where not everyone could access previous temporalities, unless through ceremonial structures, or alternatively, of group history performed at the community scale. Some groups make these physical references to earlier places, peoples, or times through more visible means, and similarly some go to greater stratigraphic and metaphorical depths to associate themselves with the earliest ancestors or earliest structures and their floors.

It appears that, similar to Barrett's (1999:259) concept of "geography of being," some if not all groups residing at the three sites in the Mimbres region may have been "able to find themselves by reference to their own biography." Narratives of a group's history or ties to places of the past were fluid and easily constructed, based on needs of the present and the projected future. It is not surprising that the Classic period contains the highest number of remembering activities and also the most ambiguous inscribed histories. This process of memory and history making and maintenance consisted of a constant and continual making and re-making. Because of this and the variety in which groups materially inscribed their perceived present on the landscape, were a left with a rich and complex palimpsest constructed by multiple interplaying actors performing memory at many scales. Whether land tenure and access to the most productive agricultural plots or ritual moral authority were the aims of the

memory performances and how those performances translate to inequality in either the ritual, social, and economic domains is a question for future research.

Contributions to Discussions within the Mimbres Region

The results of this study suggest both fluidity and variability in both the form and manner in which social memories were performed by founding and later arrival groups. This variability is consistent with different groups negotiating the pithouse-to-pueblo transition and other associated social insularity, ceremonial and economic changes (Gilman and Stone 2013; Hegmon 2002:334). Indeed, this dissertation contributes much to the larger research discourse surrounding topics such as the transition, the concept of "abandonment," and the special status Galaz and Old Town had for the communities along the Mimbres River. Specifically, according to the results of my analysis, Galaz is not occupied by a new group during the Postclassic period. As Postclassic groups were practicing the same types of social memory by referencing older places through intrusive burials and architectural superposition, it appears some remnant population remained at the site. At a larger level this study has implications for better understanding humans on the landscape, variability across the region (Hegmon 2002:344), and social inequality. Specifically, that life and domains of inequality were ephemeral and fairly fluid. Below I discuss the specific contributions this research offers the archaeological discourse in the Mimbres region, and then how it compares to the approaches and results of other Mimbres scholars, but specifically those that have sought to begin investigating social memory.

A perspective focused on continuity and discontinuity, such as the one used here, would likewise be beneficial in further refining our understanding of what happened towards A.D. 1130s and the overall reorganization of the Mimbres region. For example, even though there is a Postclassic occupation of Galaz, it is uncertain whether the reoccupation of the North room block and later construction of a separate room block is attributable to remnant group or a new one (Anyon and LeBlanc 1984: Hegmon 2002:327-328; Hegmon et al. 2010:195). I believe that due to the superposition of the Postclassic room block over an earlier Georgetown structure, and the continuity of intrusive burial performance evident in Rooms 15 and 84, that some segment of the population endured. However, it begs the question why? Does place and a group's ties to certain places of long-term sedentism, override other economic factors that make reorganization and population dispersal more attractive? Do those dispersed groups continue some of the traditions of architectural superpositioning or intrusive burials to cement ties to new or reoccupied settlements? Do they take anything from their former villages as pieces of places to remember them by and how they social order themselves according to antecedence after the move? Does memory play a role in deciding which earlier sites, if any, to reoccupy?

Regarding studies of Mimbres social memory, this present discussion both supports and diverges from both Roth and Baustian (2015) and Russell (2016) particularly with regard to social inequality. I begin with where our studies converge. I agree that if differences in social power exist through antecedence that it will be at either the community and or suprahousehold level (Roth and Baustian 2015:469).

Roth and Baustian's Harris data suggests this marking of "place" and maintaining social memory through burials of infants and ancestors may have started much earlier than the Classic period for some family groups. As Harris interestingly has no Classic occupation, it seems clear that these memory performance practices had their roots in the Late Pithouse period as early as the San Francisco phases (A.D. 65-750) but were definitely heightened during the Classic period according to the many changes in social life that occurred at this time. Social distinctions may have been more pronounced in the Late Pithouse period, but I find the Classic everyone is participating in this process not just those founding groups or early performers.

Both aforementioned studies focus heavily on land tenure as a reason for residential continuity. Unlike them, my approach examines how people invest in their landscapes but which particular attention to oldest and special structures, qualitative intimacy – we cannot always think of these things in binary presence absence terms. All things are not equal.

Based on my results and observations, I am not convinced that most groups practiced social memory and displayed antecedence primarily for land tenure and access to resources through lineage ties as Roth and Baustian (2015) have argued. The discordance between frequencies of remembering practices and founding room blocks suggests something else that is more nuanced is at work. Russell (2016:570) also observed very little overlap of founding or primacy groups and displays of antecedence (2016:570). If there is that much noise produced by virtually all room blocks contesting or parodying other groups during the Classic, then perhaps the process or

system of antecedence is too open and fluid to attain solid benefits through land tenure. In this case, I am much in agreement with the findings of Russell (2016:505) that social inequality is a process in a constant state of flux.

Neither I, nor Roth and Baustian (2015) satisfactorily explain how social memory translates to social or economic power and it is problematic assume that "wealthy" burials are the best indicators of this process. Burials reflect many things not limited to real, ideal, or exaggerated status and power. Who interprets or reads the performances on the landscape? Who approves their authenticity or intimacy with the past? These are questions I am left wondering and do not have good answers for, and one of the reasons I prefer to view differences through a lens of parody rather in addition to one of land tenure competition and contestation (Schriever 2012). Examining specific contexts of intrusive burials as well as the gap that exists between the burial date and the occupation of an earlier or earliest structure, and the stratigraphic depths with which individual were interred may be a more fruitful avenue to explore the complex relationship groups had with their past based on their hopes and needs of the present.

CHAPTER 8
CONCLUDING THOUGHTS ON MIMBRES SOCIAL MEMORY AND BEYOND

The previous chapters represent my approach and how I have grappled with and addressed the complex material patterns palimpsests constructed through group history building. In Chapter 7, I demonstrated that there is variability in which lineage and community groups perform certain social memory practices across time and space. Antecedence clearly plays a prominent role, but narrative constructions were not always about being the first or oldest. It appears that each group, even recent arrivals, such as the 400s room block at Mattocks, constructed their own histories as part of the process of finding oneself by referencing one's own biography. I argue that performing group history, regardless of historical depth, is a part of the Mimbres ethos. Groups perform Mimbres identities by interacting with Mimbres places, and through these practices everyone belongs or appears to belong. As all corporate groups appear to have access to these places of the past, it may be that social memory through shared history was an integral mechanism to tamp down or mask social inequality, making the Mimbres region unique from other ancient southwestern groups in that regard.

Below, I outline some research limitations dealing with conceptual and methodological issues to consider. Next, I highlight some interesting questions and avenues for future research both within and beyond the Mimbres region. Lastly, I discuss the significance and utility of investigating social memory of ancient peoples through a multilayered approach that allows for multi-vocal interpretations.

Research Limitations

Examining the different ways groups performed social memory for different motivations and with ever-changing conceptualizations of the past proved difficult with many limitations. These limitations include issues with comparability in data sets, often that come part and parcel with sites that have long excavation histories. I also discuss, issues with group sizes and scale of inquiry as well as my inability to get into the minds of prehistoric actors.

Comparability of some data sets and small sample sizes made it difficult to evaluate whether the patterns were real or partly a result of excavation and recording bias. And although the Mimbres data include a fairly tight chronology of structure construction, occupation, and abandonment, we do not know whether any memory or historical narrative construction was a response to the narratives of other contemporaneous groups.

At times, group size was a limiting factor. I chose the corporate room block scale because I was interested in it, but also because I could not compare groups at the household scale. Indeed, distinct room suites inhabited by households are not well observed for Galaz (Anyon and LeBlanc 1984; Hegmon 2002:334). Lumping groups obfuscates the relationship and fluidity between households and larger social organization for groups living in the past.

I do not confidently know who is doing what, with which aim(s) in mind, and if any narratives or memory performances are reactions to the actions and performances of others. For example, how does one distinguish memory practices

relating to certain people, places, or events? Is there a way to move forward by equating events with ceremonial contexts and associated people or places with habitational structures perhaps with other interred individuals of different ages placed throughout multiple generations? Who is involved in certain commemorative activities, who is the intended audience, and for whom are these activities and palimpsest visible? Do these activities change through time? Can we detect those changes in meaning or significances through the manners in which they are performed and the lengths inhabitants go to place the present alongside the past? Perhaps there are some ways forward by examining qualitative differences in age groups of intrusive burials within and between sites. Maybe infants create or maintain continuity, whereas old adults have personal knowledge of older places or ancestors. Like all archaeological research, I end with some unanswered questions.

Future studies will need to better grapple with some of these issues. Collaborations with indigenous communities should be a future direction for memory studies of ancient group to better understand narrative constructions, the values different communities imbued in the landscape of places of the past, and the power and roles ancestors played.

Future Research

Future research can seek to answer some of the more complicated and intriguing questions or gray and ambiguous areas. Additional genetic or other testing to confirm affiliation of room block residents would be very helpful. I plan to further contextualize the observations and conclusions I made with regards to memory

performances at NAN Ranch, Galaz, and Mattocks by including other sites within and outside of the Mimbres Valley. It would also be interesting to examine social memory through an animacy perspective.

In an ideal world, additional genetic testing could shed some light on the accuracy of equating room blocks with residential lineage or corporate groups. Do the founding groups remain distinct through time? Are intrusive burials related to those in the same rooms that were buried during occupation. Or are they not and are possibly inventions of affiliation? Are non-local groups also participating in displays of antecedence even if they have fewer claims to primacy? Are Mimbres groups matrilineal as has been suggested for Pueblo Bonito at Chaco Canyon (Kennett et al. 2017)? Has a long enough time passed that anyone can claim ties to certain places on the landscape? A study like this would have serious implications and insights for the operationalized history to myth processes across many generations. Snow et al. (2011) have suggested that most of the tested remains clustered closest with other pan-southwestern groups, but that one female individual from Transitional Room 104 of the South room block of the NAN Ranch site was more similar to northern Mexican haplogroups. Therefore, genetic testing may be a fruitful avenue to explore group formation and maintenance.

In my future work, I plan to expand the present study to include other sites with equally rich datasets to continue to investigate social memory performances comprehensively and diachronically. Specifically, I would like to compare the sites of Galaz and Old Town, both of which probably served as important ceremonial sites for

neighboring villages (Creel and Anyon 2003). It would be intriguing to examine whether this intimacy with the far distant past and long enduring group history construction is more unique to Old Town and Galaz than other sites in the Mimbres Valley. For example, Old Town may house evidence of the burial of certain special individuals commemorated or remembered through secondary removal and reburial and deliberate contact with earlier ceremonial floors, not seen as often at Galaz (Creel 2006:38-39). As differences exist in how groups negotiated the pithouse-to-pueblo transition between the Gila and Mimbres Valley regions (Sedig 2015), and groups in the Eastern Mimbres used different land use strategies than groups in the Mimbres Valley (Hegmon 2002), I would add sites from both of these areas to ascertain if they are remembering or forgetting similarly or at similar frequencies through time as people in the Mimbres Valley. Are the Gila groups more pronounced and less nuanced in their use of social memory to display antecedence and perhaps land tenure rights to certain productive agricultural plots? I may also include an additional line of evidence concerning continuity and discontinuity though ceramic design analysis. For example, which elements are used longer or are forgotten or are reclaimed in later styles?

While somewhat implied in this dissertation, it might be very interesting and beneficial to examine people and places of the past in terms of animacy. Were the dead or houses considered to be living and what roles did they play in their own right? Are ancestors kept alive and relevant through intrusive burials? Do the spaces they inhabit have more power than others? This perspective may be productive in

explaining why some places are remembered or re-claimed and others are avoided or forgotten.

Contributions and Broader Impact of the Approach Beyond the Mimbres Region

This approach seeks to understand how social memory can be operationalized and inscribed into the landscapes of peoples of the past. There is flexibility in how much weight can be given each variable or group of variables, and those can differ from context to context. A similar approach could be greatly enhanced given an indigenous perspective especially concerning participatory group size and visibility of certain material behaviors, and I freely acknowledge some biases in the significances placed on certain activities in my interpretations.

One strength of this multivariable approach focusing on adding, cutting, and palimpsest activities, is the marriage of materiality and social memory with a robust dataset of both habituated and commemorative memory, tight chronology, and variability in interpretation and significance of memory practices. Although this approach might not work for all contexts, as some groups do not practice intramural let alone intrusive intramural burials, it has applicability to other regions beyond the North American Southwest. It would be intriguing to compare post-abandonment memory practices and place-making strategies for two sets of settled farmers such as the Mimbres inhabitants and the Pre-Pottery Neolithic groups at Çatalhöyük. Further, it would be interesting and valuable to compare socially complex and less hierarchical groups in terms of their memory practices. My approach may be applied and work better in cultural areas with stronger ethnohistorical data and research, as additional

context may give a clearer idea of how certain measures may fall on the remembering/ forgetting spectrum.

The social questions this type of approach seeks to answer have important implications for the study of the intertwined social processes involved in the formation and inhabitation of place, the creation of memories, and the negotiation of group identities and social order. Moreover, the interaction of and with the past is not a phenomenon unique to modern times. Indeed, the term "prehistory" is misleading, because overlooks the bias of one's perceived history and social memory of the present and its effect on the production of material culture, order, and representation of the created world.

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APPENDIX A
SUMMARY OF INTRUSIVE BURIAL DATA

NAN Ranch Intrusive Burials.

Burial #	Room #	Room Block [A]	Context [B]	Other Burials [C]	Superimposed [D]	Burial Date [E]	Room Date [F]	Gap (phase)	Depth	Age [G]	Sex [H]	Vessels Present [I]
12	40	E	h	y	y	C	C	0	near floor	A	M	y
51	52	E	c	n	y	T	TC	1	fill	OA	F	y
52	52	E	c	n	y	T	TC	1	fill	A	M	n
53	52	E	c	n	y	T	TC	1	fill	OA	ind.	n
60	52	E	c	n	y	T	TC	1	fill	OA	M	n
65	57/52	E	c	n	y	T	T	0	fill	I	ind.	n
98	65	E	h	n	n	C	C	0	below floor	C	ind.	n
80	15	E	h	n	n	C	TC	2	ph fill	OA	ind.	n
92	15	E	h	n	n	C	TC	2	ph fill	A	M	n
105	84	E	h	y	y	C	TC	2	on floor	A	F	n
219	94	S	h	y	n	C	C	0	near floor	A	ind.	n
220	94	S	h	y	n	C	C	0	near floor	C	ind.	n
78	65	E	h	n	n	C	C	0	below floor	A	F	n
115	92	SE	h	n	y	C	C	0	fill	A	M	n
109	86	SE	h	y	y	C	SF	3	fill	A	M	n

Burial #	Room #	Room Block [A]	Context [B]	Other Burials [C]	Superimposed [D]	Burial Date [E]	Room Date [F]	Gap (phase)	Depth	Age [G]	Sex [H]	Vessels Present [I]
175	86	SE	h	y	y	C	SF	0-3	fill	A	ind.	n
226	116	S	h	n	y	T/C	TC	1 - 2	below floor	I	ind.	n
218	112	E p	h	y	y	T	TC	1	near floor	ind.	ind.	y
160	99	SE	h	y	y	C	T	1	below floor	A	M	n
171	95/ 100	SE	h	n	y	C	SF	2	fill	C	ind.	n
130	76	E	h	y	n	C	C	0	below floor	A	F	n
95	17	E	h	y?	y	T	TC	1	fill	A	M	y
81	63 A/B	E	h	y	y	C	C	0	below floor	I	ind.	n
88	63 A/B	E	h	y	y	C	C	0	below floor	A	M	n
79	63 A/B	E	h	y	y	C	C	0	below floor	I	ind.	n
80?	63 A/B	E	h	y	y	C	C	0	below floor	I	ind.	y
ukn.	102/ 104	S	h	y	y	T	TC	1	n.d.	Ind.	Ind.	y, n

[A]Room Block E=East, SE=Southeast, S=South, Ep= East plaza

[B]Context c=ceremonial, h=habitation

[C]Other burials y=yes n=no

[D]Superimposed y=yes n=no

[E]Burial Date C=Classic, T=Transitional, T/C=Transitional/Classic

[F]Room Date SF=San Francisco, TC=Three Circle, C=Classic
[G]Age A=Adult, OA= Old Adult, C=Child, I=Infant, ind=indeterminate
[H]Sex M=Male, F=Female, Ind=Indeterminate
[I]Vessels y=yes, n=no

Mattocks Intrusive Burials.

Burial #	Room #	Room Block [A]	Context [B]	Other Burials [C]	Superimposed [D]	Burial Date [E]	Room Date [F]	Gap (phases)	Depth	Age [G]	Sex [H]	Vessels [I]
1-1B	80b	SE	h	n	n	C	G	3	below floor	A	F?	y
5F-12B	80b	SE	h	n	n	C	G	3	below floor	A	M	y
6S-17B	80b	SE	h	n	n	C	G	3	below floor	A	ind.	y
2-10B	80b	SE	h	n	n	C	G	3	fill	ind.	ind.	y
3-11B #1/4	80b	SE	h	n	n	C	G	3	fill/ wall/ floor	C	F?	y
3-11B #2/5	80b	SE	h	n	n	C	G	3	fill/ wall/ floor	A	M	y
2-20B	80b	SE	h	n	n	C	G	3	fill/ wall/ floor	OA	M	y
5-6	115a	100s	h	y	y	C	C	0	below floor	A	M	y
7-21	115a	100s	h	y	y	C	TC	1	wall/ floor	A	ind.	y
locus 7-24	115a	100s	h	y	y	C	TC	1	wall/ floor	C	F?	y

Burial #	Room #	Room Block [A]	Context [B]	Other Burials [C]	Superimposed [D]	Burial Date [E]	Room Date [F]	Gap (phases)	Depth	Age [G]	Sex [H]	Vessels [I]
10-25	115a	100s	h	y	y	C	TC	1	below floor	A	M	y
locus 6-17	115a	100s	h		y	C	C		below floor	ind.	ind.	y
139	45	100s	h?	y	n	C	C	0	fill	ind.	ind.	n
140	45	100s	h?	y	n	C	C	0	fill	ind.	ind.	n
3-5	286b	200s	c	y	y	LP/C	TC	0-1	fill/ near floor	A	M	y
4-7	286a	200s	c	y	y	LP/C	C	0-1	below floor	OA	F?	y
7-17	286b	200s	c	y	y	LP/C	TC	0-1	below floor	OA	F	y
5-7	325	300s	h	n	n	C	C	0	below floor	A	M	n
3-8	426	400s	h	y	n	C	C	0	below floor	n.d.	n.d.	n
No #	426	400s	h	y	n	C	C	0	below floor	A	M	y
5-6	431	400s	h	y	n	C	C	0	below floor	C	ind.	y
5-15	431	400s	h	y	n	C	C	0	below floor	I	ind.	y
5-14/1	435a	400s	h	y	n?	C	C	0	below floor	A	M	y

Burial #	Room #	Room Block [A]	Context [B]	Other Burials [C]	Superimposed [D]	Burial Date [E]	Room Date [F]	Gap (phases)	Depth	Age [G]	Sex [H]	Vessels [I]
5-14/2	43 5a	40 0s	h	y	n	C	C	0	below floor	C	n.d.	y
5-16	43 5a	40 0s	h	y	n	C	C	0	below floor	ind.	ind.	y
5-18/1	43 5a	40 0s	h	y	n	C	C	0	below floor	C	ind.	y
5-18/4	43 5a	40 0s	h	y	n	C	C	0	below floor	A	ind.	y

[A]Room Block SE=Nesbitt's Southeast group

[B]Context c=ceremonial, h=habitation

[C]Other burials y=yes n=no

[D]Superimposed y=yes n=no

[E]Burial Date C=Classic, LP/C=Late Pithouse/Classic

[F]Room Date G=Georgetown, TC=Three Circle, C=Classic

[G]Age A=Adult, OA= Old Adult, C=Child, I=Infant, ind=indeterminate

[H]Sex M=Male, F=Female, Ind=Indeterminate

[I]Vessels y=yes, n=no

Galaz Intrusive Burials.

Burial #	Room #	Room Block [A]	Context [B]	Other Burials [C]	Superimposed [D]	Burial Date [E]	Room Date [F]	Gap (phases)	Depth	Age [G]	Sex [H]	Vessels Present [I]
11-440	47 (42)	N	c	y	y	C	TC	1	fill	C	I	y
11-443	47 (42)	N	c	y	y	C	TC	1	fill	C	I	y
11-448	47 (42)	N	c	y	y	C	TC	1	fill	I	I	n
15-168	47 (42)	N	c	y	y	C	TC	1	fill	I	I	y
2-329	42	N	c	y	y	C	TC	1	fill	A	I	n
2-355	42	N	c	y	y	C	TC	1	fill	A	I	y
2-305	42	N	c	y	y	C	TC	1	fill	A	I	n
2-328	42	N	c	y	y	C	TC	1	fill	A or OA	F	n
2-339	42	N	c	y	y	C	TC	1	fill	A	I	n
2-334	42	N	c	y	y	C	TC	1	fill	C	I	n
2-354	42	N	c	y	y	C	TC	1	fill	A	I	n
2-335	42	N	c	y	y	C	TC	1	fill	I	I	y
2-330	42	N	c	y	y	C	TC	1	fill	C	I	y

Burial #	Room #	Room Block [A]	Context [B]	Other Burials [C]	Superimposed [D]	Burial Date [E]	Room Date [F]	Gap (phases)	Depth	Age [G]	Sex [H]	Vessels [I]
2-331	42	N	c	y	y	C	TC	1	fill	C	I	y
2-358	42	N	c	y	y	C	TC	1	fill	OA	I	n
15-188	42	N	c	y	y	C	TC	1	fill	A	I	n
11-405	42	N	c	y	y	C	TC	1	fill	A	I	y
11-406	42	N	c	y	y	C	TC	1	fill	A	I	n
11-409	42	N	c	y	y	C	TC	1	fill	A	I	y
11-463	42A	N	c	y	y	C	TC	1	fill	C	I	y
11-468	42A	N	c	y	y	C	TC	1	fill	A	i	n
11-442	42A	N	c	y	y	C	TC	1	fill	I	i	y
11-449	42A	N	c	y	y	C	TC	1	fill	C	i	y
11-451	42A	N	c	y	y	C	TC	1	fill	A	i	y
11-493	42A	N	c	y	y	C	TC	1	fill	A	I	n
11-457	42A	N	c	y	y	C	TC	1	fill	A	I	y

Burial #	Room #	Room Block [A]	Context [B]	Other Burials [C]	Superimposed [D]	Burial Date [E]	Room Date [F]	Gap (phases)	Depth	Age [G]	Sex [H]	Vessels [I]
11-465	42A	N	c	y	y	C	TC	1	fill	C	I	n
11-495	42A	N	c	y	y	C	TC	1	fill	A	I	n
11-496	42A	N	c	y	y	C	TC	1	fill	A	I	n
11-479	42A	N	c	y	y	C	TC	1	fill	A	I	n
11-500	42A	N	c	y	y	C	TC	1	fill	OA	I	y
11-499	42A	N	c	y	y	C	TC	1	fill	OA	I	n
15-89	42A	N	c	y	y	C	TC	1	fill	A	I	n
15-66	85B	N	c	y	y	C	TC	1	fill	A	I	n
15-81	85B	N	c	y	y	C	TC	1	fill	C	I	y
15-126	85B	N	c	y	y	C	TC	1	fill	A	I	y
15-128	85B	N	c	y	y	C	TC	1	fill	I	I	y
15-133	85B	N	c	y	y	C	TC	1	fill	A	I	n
15-134	85B	N	c	y	y	C	TC	1	fill	A	M	n

Burial #	Room #	Room Block [A]	Context [B]	Other Burials [C]	Superimposed [D]	Burial Date [E]	Room Date [F]	Gap (phases)	Depth	Age [G]	Sex [H]	Vessels [I]
15-140	85B	N	c	y	y	C	TC	1	fill	A	I	n
15-147	85B	N	c	y	y	C	TC	1	fill	C	I	y
15-153	85B	N	c	y	y	C	TC	1	fill	A	F	y
15-157	85B	N	c	y	y	C	TC	1	fill	A	I	n
15-99	84A	N	c	y	y	C	TC	1	fill	I	I	y
15-105	84A	N	c	y	y	C	TC	1	fill	C	I	y
15-127	84A	N	c	y	y	C	TC	1	fill	A	I	y
15-129	84A	N	c	y	y	C	TC	1	fill	A	M	y
15-154	84A	N	c	y	y	C	TC	1	fill	OA	M	y
15-156	84A	N	c	y	y	C	TC	1	fill	C	I	y
15-158	84A	N	c	y	y	C	TC	1	fill	OA	F	y
15-149	84A	N	c	y	y	C	TC	1	fill	I	I	n
15-247	107	SE	c	y?	n	C?	C	0	fill?	ind.	I	n

Burial #	Room #	Room Block [A]	Context [B]	Other Burials [C]	Superimposed [D]	Burial Date [E]	Room Date [F]	Gap (phases)	Depth	Age [G]	Sex [H]	Vessels [I]
15-252	107	SE	c	y?	n	C	C	0	fill?	A	I	y
20-6-20	20	N	h	y	y	LP/C	SF	0-2	floor	I	I	n
11-4-11	11	SW	h	y	n	LP/C	TC	0-1	fill	A	I	y
14	27	SE	h	y	y	LP/C	SF	0-2	fill	A	nd	y
2-92	15	N	c	y	y	PC	C	1	on floor	C	I	n
2-100	15	N	c	y	y	PC	C	1	on floor	I	I	y
2-103	15	N	c	y	y	PC	C	1	at floor	A	I	n
2-104	15	N	c	y	y	PC	C	1	at floor	A	I	n
2-105	15	N	c	y	y	PC	C	1	near floor	OA	M	y
2-114	15	N	c	y	y	PC	C	1	on floor	C	I	y
2-112	15	N	c	y	y	PC	C	1	on floor	OA	M	y
No #	103	N	?	y	y?	PC	C	1	fill?	I	I	y
15-71	84	N	c	y	y	PC	C	1	fill	C	I	y
15-69	84	N	c	y	y	PC	C	1	fill	A	I	y

Burial #	Room #	Room Block [A]	Context [B]	Other Burials [C]	Superimposed [D]	Burial Date [E]	Room Date [F]	Gap (phases)	Depth	Age [G]	Sex [H]	Vessels [I]
15-60	84	N	c	y	y	PC	C	1	fill	A	I	y
15-24	78	SE	h	n	n	C	C	0	below floor	A	M	n
15-48	81	SE	h	y	y	C	C	0	near floor	C	I	nd

[A]Room Block N=North, SE=Southeast, SW=Southwest
[B]Context c=ceremonial, h=habitation
[C]Other burials y=yes n=no
[D]Superimposed y=yes n=no
[E]Burial Date C=Classic, LP/C= Late Pithouse/Classic, PC=Postclassic
[F]Room Date SF=San Francisco, TC=Three Circle, C=Classic
[G]Age A=Adult, OA= Old Adult, C=Child, I=Infant, ind=indeterminate
[H]Sex M=Male, F=Female, I=Indeterminate
[I]Vessels y=yes, n=no, nd=no data

APPENDIX B
ACCOMPANYING TABLES STANDARDIZING DATA FOR CHAPTER 7 LINE GRAPHS

NAN Ranch East Room Block Standardized Event Dates through Time (Figure 7.1).

Memory Type	Pre-Classic count	Pre-Classic stand.	Classic count	Classic stand.	Standard
Occupation Remembering	3	0.43	7	1	1=7
Abandonment Remembering	5	1	3	0.6	1=5
Post Remembering	12	0.25	48	1	1=48
Post Forgetting	10	1	7	0.7	1=10
Occupation Either	1	1	1	1	1=1
Abandonment Either	4	0.27	15	1	1=15
Post Either	8	1	5	0.63	1=8

NAN Ranch East Room Block Standardized Remembering, Forgetting, or Either/Both through Time (Figure 7.2).

Memory Type	Pre-Classic count	Pre-Classic stand.	Classic count	Classic stand.	Standard
Remembering	20	0.34	58	1	1=58
Forgetting	10	1	7	0.7	1=10
Either	13	0.62	21	1	1=21

NAN Ranch South Room Block Standardized Event Dates through Time (Figure 7.3).

Memory Type	Pre-Classic count	Pre-Classic stand.	Classic count	Classic stand.	Standard
Occupation Remembering	1	0.17	6	1	1=6
Abandonment Remembering	2	1	1	0.5	1=2
Post Remembering	4	0.2	20	1	1=20
Post Forgetting	7	1	0	0	1=7
Occupation Either	0	0	2	1	1=2
Abandonment Either	3	0.5	6	1	1=6
Post Either	0	0	1	1	1=1

NAN Ranch South Room Block Standardized Remembering, Forgetting, or Either/Both through Time (Figure 7.4).

Memory Type	Pre-Classic count	Pre-Classic stand.	Classic count	Classic stand.	Standard
Remembering	7	0.26	27	1	1=27
Forgetting	7	1	0	0	1=7
Either	3	0.33	9	1	1=9

NAN Ranch Southeast Room Block Standardized Event Dates through Time (Figure 7.5).

Memory Type	Pre-Classic count	Pre-Classic stand.	Classic count	Classic stand.	Standard
Occupation Remembering	2	1	0	0	1=2
Abandonment Remembering	1	0.5	2	1	1=2
Post Remembering	7	0.88	8	1	1=8
Post Forgetting	2	1	0	0	1=2
Occupation Either	0	0	0	0	0
Abandonment Either	3	1	0	0	1=3
Post Either	1	1	0	0	1=1

NAN Ranch Southeast Room Block Standardized Remembering, Forgetting, or Either/Both through Time (Figure 7.6).

Memory Type	Pre-Classic count	Pre-Classic stand.	Classic count	Classic stand.	Standard
Remembering	10	1	10	1	1=10
Forgetting	2	1	0	0	1=2
Either	4	1	0	0	1=4

NAN Ranch All Room Blocks Standardized Remembering, Forgetting, or Either/Both through Time (Figure 7.7).

Memory Type	Pre-Classic count	Pre-Classic stand.	Classic count	Classic stand.	Standard
Remembering	37	0.39	95	1	1=95
Forgetting	19	1	7	0.37	1=19
Either	20	0.67	30	1	1=30

NAN Ranch All Room Blocks Standardized Remembering Only through Time (Figure 7.8).

Room Block	Pre-Classic count	Pre-Classic stand.	Classic count	Classic stand.	Standard
E Remembering	20	0.35	58	1	1=58
S Remembering	7	0.12	27	0.46	
SE Remembering	10	0.17	10	0.17	

Galaz North Room Block Standardized Event Dates through Time (Figure 7.9).

Memory Type	Pre-Classic count	Pre-Classic stand.	Classic count	Classic stand.	Postclassic count	Postclassic stand.	Standard
Occupation Remembering	6	1	5	0.83	0	0	1=6
Abandonment Remembering	3	1	1	0.33	0	0	1=3
Post Remembering	3	0.04	68	1	11	0.16	1=68
Post Forgetting	1	0.5	2	1	0	0	1=2
Occupation Either	3	0.3	10	1	0	0	1=10
Abandonment Either	5	0.71	7	1	0	0	1=7
Post Either	1	0.25	4	1	0	0	1=4

Galaz North Room Block Standardized Remembering, Forgetting, or Either/Both through Time (Figure 7.10).

Memory Type	Pre-Classic count	Pre-Classic stand.	Classic count	Classic stand.	Postclassic count	Postclassic stand.	Standard
Remembering	12	0.16	74	1	11	0.15	1=74
Forgetting	1	0.5	2	1	0	0	1=2
Either	9	0.43	21	1	0	0	1=21

Galaz Southeast Room Block Standardized Event Dates through Time (Figure 7.11).

Memory Type	Pre-Classic count	Pre-Classic	Classic count	Classic	Postclassic count	Postclassic	Standard
Occupation Remembering	2	0.18	11	1	0	0	1=11
Abandonment Remembering	1	0.5	2	1	0	0	1=2
Post Remembering	0	0	15	1	10	0.67	1=15
Post Forgetting	1	0.5	2	1	0	0	1=2
Occupation Either	0	0	1	1	0	0	1=1
Abandonment Either	3	1	0	0	0	0	1=3
Post Either	0	0	2	1	0	0	1=2

Galaz Southeast Room Block Standardized Remembering, Forgetting, or Either/Both through Time (Figure 7.12).

Memory Type	Pre-Classic count	Pre-Classic stand.	Classic count	Classic stand.	Postclassic count	Postclassic stand.	Standard
Remembering	3	0.11	28	1	10	0.36	1=28
Forgetting	1	0.5	2	1	0	0	1=2
Either	3	1	3	1	0	0	1=3

Galaz Southwest Room Block Standardized Event Dates through Time (Figure 7.13).

Memory Type	Pre-Classic count	Pre-Classic stand.	Classic count	Classic stand.	Standard
Occupation Remembering	5	0.63	8	1	1=8
Abandonment Remembering	3	1	1	0.33	1=3
Post Remembering	11	1	7	0.64	1=11
Post Forgetting	4	1	1	0.25	1=4
Occupation Either	0	0	0	0	0
Abandonment Either	10	1	1	0.1	1=10
Post Either	4	1	4	1	1=4

Galaz Southwest Room Block Standardized Remembering, Forgetting, or Either/Both through Time (Figure 7.14).

Memory Type	Pre-Classic count	Pre-Classic stand.	Classic count	Classic stand.	Standard
Remembering	19	1	16	0.84	1=19
Forgetting	4	1	1	0.25	1=4
Either	14	1	5	0.36	1=14

Galaz All Room Blocks Standardized Remembering, Forgetting, or Either/Both through Time (Figure 7.15).

Memory Type	Pre-Classic count	Pre-Classic stand.	Classic count	Classic stand.	Post-Classic count	Postclassic stand.	Standard
Remembering	34	0.27	128	1	21	0.16	1=128
Forgetting	6	1	1	0.17	0	0	1=6
Either	26	1	20	0.77	0	0	1=26

Galaz All Room Blocks Standardized Remembering Only through Time (Figure 7.16).

Room Block	Pre-Classic count	Pre-Classic stand.	Classic count	Classic stand.	Postclassic	Postclassic stand.	Standard
N Remembering	12	0.16	74	1	11	0.15	1=74
SE Remembering	3	0.04	28	0.38	10	0.14	
SW Remembering	19	0.26	16	0.22	0	0	

Mattocks 100s Room Block Standardized Event Dates through Time (Figure 7.17).

Memory Type	Pre-Classic count	Pre-Classic stand.	Classic count	Classic stand.	Standard
Occupation Remembering	1	0.5	2	1	1=2
Abandonment Remembering	1	1	0	0	1=1
Post Remembering	0	0	8	1	1=8
Post Forgetting	0	0	3	1	1=3
Occupation Either	0	0	0	0	0
Abandonment Either	0	0	2	1	1=2
Post Either	1	0.5	2	1	1=2

Mattocks 100s Room Block Standardized Remembering, Forgetting, or Either/Both through Time (Figure 7.18).

Memory Type	Pre-Classic count	Pre-Classic stand.	Classic count	Classic stand.	Standard
Remembering	2	0.2	10	1	1=10
Forgetting	0	0	3	1	1=3
Either	1	0.25	4	1	4

Mattocks 200s Room Block Standardized Event Dates through Time (Figure 7.19).

Memory Type	Pre-Classic count	Pre-Classic stand.	Classic count	Classic stand.	Standard
Occupation Remembering	1	0.33	3	1	1=3
Abandonment Remembering	2	1	0	0	1=2
Post Remembering	1	0.14	7	1	1=7
Post Forgetting	0	0	4	1	1=4
Occupation Either	0	0	0	0	0
Abandonment Either	2	1	1	0.5	1=2
Post Either	2	1	0	0	1=2

Mattocks 200s Room Block Standardized Remembering, Forgetting, or Either/Both through Time (Figure 7.20).

Memory Type	Pre-Classic count	Pre-Classic stand.	Classic count	Classic stand.	Standard
Remembering	4	0.4	10	1	1=10
Forgetting	0	0	4	1	1=4
Either	4	1	1	0.25	1=4

Mattocks 400s Room Block Standardized Remembering, Forgetting, or Either/Both through Time (Figure 7.21).

Memory Type	Pre-Classic count	Pre-Classic stand.	Classic count	Classic stand.	Standard
Remembering	0	0	27	1	1=27
Forgetting	0	0	4	1	1=4
Either	0	0	8	1	1=8

Mattocks All Room Blocks Standardized Remembering Only through Time (Figure 7.22).

Room Block	Pre-Classic count	Pre-Classic stand	Classic count	Classic stand	Standard
100s Remembering	2	0.07	10	0.37	1=27
200s Remembering	4	0.15	10	0.37	
300s Remembering	0	0	2	0.07	
400s Remembering	0	0	27	1	
SE Remembering	0	0	7	0.26	

Galaz All Room Blocks Standardized Tier 1 Commemorative Memory Measures (Figure 7.23).

Galaz	Pre-Classic count	Pre-Classic stand.	Classic count	Classic stand.	Postclassic count	Postclassic stand.	Standard
North	9	0.13	70	1	10	0.14	1=70
Southeast	3	0.04	7	0.1	0	0	
Southwest	11	0.16	5	0.07	0	0	

NAN Ranch All Room Blocks Standardized Tier 1 Commemorative Memory Measures (Figure 7.24).

NAN Ranch	Pre-Classic count	Pre-Classic stand.	Classic count	Classic stand.	Standard
East	12	0.48	25	1	1=25
South	2	0.08	8	0.32	
Southeast	8	0.32	0	0	

Mattocks All Room Blocks Standardized Tier 1 Commemorative Memory Measures (Figure 7.25).

Mattocks	Pre-Classic count	Pre-Classic stand	Classic count	Classic stand.	Standard
100s	0	0	3	0.43	
200s	2	0.29	3	0.43	
400s	0	0	5	0.71	
Southeast	0	0	7	1	1=7

All Sites and All Room Blocks Standardized Remembering Only through Time (Figure 7.29).

All Room Blocks	Pre-Classic count	Pre-Classic stand.	Classic count	Classic stand.	Postclassic	Postclassic stand.	Standard
Galaz N	12	0.16	74	1	11	0.15	
Galaz SE	3	0.04	28	0.38	10	0.14	74=1
Galaz SW	19	0.26	16	0.22	0	0	
NAN E	20	0.27	58	0.78	0	0	
NAN S	7	0.09	27	0.36	0	0	
NAN SE	10	0.14	10	0.14	0	0	
Mattocks 100s	2	0.02	10	0.14	0	0	
Mattocks 200s	4	0.05	10	0.14	0	0	
Mattocks 300s	0	0	2	0.02	0	0	
Mattocks 400s	0	0	27	0.36	0	0	
Mattocks SE	0	0	7	0.09	0	0	